

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

## 1 Identification

- **Product identifier**
- **Trade name:** Acetic Acid Glacial
- **Article number:** 10040, 10041
- **CAS Number:**  
64-19-7
- **EC number:**  
200-580-7
- **Index number:**  
607-002-00-6
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

---



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

---

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Corrosive

Causes severe burns.  
Flammable.

- **Information concerning particular hazards for human and environment:** Not applicable.
- 

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

(Contd. on page 2)

USA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 1)

· **Code letter and hazard designation of product:**



Corrosive

· **Risk phrases:**

Flammable.  
Causes severe burns.

· **Safety phrases:**

Keep locked up and out of the reach of children.  
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3  
Fire = 2  
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 4  
Fire = 2  
Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.  
· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

64-19-7 Acetic Acid Glacial

· **Identification number(s)**

· **EC number:** 200-580-7

· **Index number:** 607-002-00-6

### 4 First-aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.  
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.  
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.  
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.  
· **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.  
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 2)

- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 3)

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

**64-19-7 Acetic Acid Glacial**

PEL Long-term value: 25 mg/m<sup>3</sup>, 10 ppm

REL Short-term value: 37 mg/m<sup>3</sup>, 15 ppm

Long-term value: 25 mg/m<sup>3</sup>, 10 ppm

TLV Short-term value: 37 mg/m<sup>3</sup>, 15 ppm

Long-term value: 25 mg/m<sup>3</sup>, 10 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Fluid

**Color:** Colorless

· **Odor:** Pungent

(Contd. on page 5)

-USA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 4)

· <b>Odour threshold:</b>	Not determined.
· <b>pH-value (10 g/l) at 20 °C (68 °F):</b>	2.5
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	16.6 °C (62 °F)
<b>Boiling point/Boiling range:</b>	118 °C (244 °F)
· <b>Flash point:</b>	40 °C (104 °F)
· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Ignition temperature:</b>	426 °C (799 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Not determined.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	4 Vol %
<b>Upper:</b>	19 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	11.4 hPa (9 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	1.05 g/cm <sup>3</sup> (8.762 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic at 25 °C (77 °F):</b>	1.53 mPas
<b>Kinematic:</b>	Not determined.
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

USA

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 5)

## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)** Substance is not listed.

- **NTP (National Toxicology Program)** Substance is not listed.

- **OSHA-Ca (Occupational Safety Health Administration)** Substance is not listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

USA

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS





Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 6)

## 14 Transport information

<b>· UN-Number</b>	UN2789
<b>· DOT, ADR, IMDG, IATA</b>	
<b>· UN proper shipping name</b>	Acetic acid, glacial
<b>· DOT</b>	2789 Acetic acid, glacial
<b>· ADR</b>	ACETIC ACID, GLACIAL
<b>· IMDG, IATA</b>	
<b>· Transport hazard class(es)</b>	
<b>· DOT</b>	
	
<b>· Class</b>	8 Corrosive substances
<b>· Label</b>	8+3
<b>· ADR, IMDG, IATA</b>	
	
<b>· Class</b>	8 Corrosive substances
<b>· Label</b>	8+3
<b>· Packing group</b>	II
<b>· DOT, ADR, IMDG, IATA</b>	
<b>· Environmental hazards:</b>	
<b>· Marine pollutant:</b>	No
<b>· Special precautions for user</b>	Warning: Corrosive substances
<b>· Danger code (Kemler):</b>	83
<b>· EMS Number:</b>	F-E,S-C
<b>· Segregation groups</b>	Acids
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· Transport/Additional information:</b>	
<b>· DOT</b>	
<b>· Quantity limitations</b>	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
<b>· Hazardous substance:</b>	5000 lbs, 2270 kg
<b>· ADR</b>	
<b>· Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<b>· IMDG</b>	
<b>· Limited quantities (LQ)</b>	1L

(Contd. on page 8)

USA

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 7)

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>Excepted quantities (EQ)</b></li> </ul> | <p>Code: E2</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p> |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>   | <p>UN2789, Acetic acid, glacial, 8 (3), II</p>   |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
  - **Section 355 (extremely hazardous substances):** Substance is not listed.
  - **Section 313 (Specific toxic chemical listings):** Substance is not listed.
  - **TSCA (Toxic Substances Control Act):** Substance is listed.
  - **Proposition 65**
  - **Chemicals known to cause cancer:** Substance is not listed.
  - **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
  - **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
  - **Chemicals known to cause developmental toxicity:** Substance is not listed.
  - **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)** Substance is not listed.
  - **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
  - **Product related hazard informations:**  
The product has been classified and marked in accordance with directives on hazardous materials.
  - **Hazard symbols:**
- 

Corrosive
- **Risk phrases:**  
Flammable.  
Causes severe burns.
  - **Safety phrases:**  
Keep locked up and out of the reach of children.  
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
  - **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 05/26/2015 / -
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association

(Contd. on page 9)



**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 05/26/2015

Reviewed on 05/26/2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 8)

*ACGIH: American Conference of Governmental Industrial Hygienists*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*  
*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*

USA

**Safety data sheet**  
according to 1907/2006/EC, Article 31


Printing date 26.05.2015

Revision: 26.05.2015

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Acetic Acid Glacial
- **Article number:** 10040, 10041
- **CAS Number:**  
64-19-7
- **EC number:**  
200-580-7
- **Index number:**  
607-002-00-6
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ProSciTech Pty Ltd  
11 Carlton Street, Kirwan QLD 4817 Australia  
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)
- Emgrid Australia Pty. Ltd.  
P.O. Box 118  
The Patch VIC 3792  
Australia  
Tel: 03 9752 1785  
Fax: 03 9752 1784  
Website: www.emgrid.com.au
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
 Corrosive  
Causes severe burns.  
Flammable.
  - **Information concerning particular hazards for human and environment:** Not applicable.
- 
- **Label elements**
  - **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 2)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

Trade name: Acetic Acid Glacial

(Contd. of page 1)

· **Code letter and hazard designation of product:**



Corrosive

· **Risk phrases:**

*Flammable.*

*Causes severe burns.*

· **Information concerning particular hazards for human and environment:**

· **Safety phrases:**

*Keep locked up and out of the reach of children.*

*Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).*

*In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*

*In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).*

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterisation: Substances**

· **CAS No. Description**

64-19-7 Acetic Acid Glacial

· **Identification number(s)**

· **EC number:** 200-580-7

· **Index number:** 607-002-00-6

### 4 First aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

*No further relevant information available.*

### 5 Firefighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

*CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** No special measures required.

AU

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

Trade name: Acetic Acid Glacial

(Contd. of page 2)

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

#### Ingredients with limit values that require monitoring at the workplace:

##### 64-19-7 Acetic Acid Glacial

NES	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
-----	---

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

(Contd. on page 4)

-AU-

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 3)

- **Respiratory protection:**

*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*

- **Protection of hands:**



Protective gloves

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

- **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.*

- **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Pungent
<b>Odour threshold:</b>	Not determined.

- **pH-value (10 g/l) at 20 °C:** 2.5

- **Change in condition**

<b>Melting point/Melting range:</b>	16.6 °C
<b>Boiling point/Boiling range:</b>	118 °C

- **Flash point:** 40 °C

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 426 °C

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Not determined.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**

<b>Lower:</b>	4 Vol %
---------------	---------

(Contd. on page 5)

-AU-

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 4)

<b>Upper:</b>	19 Vol %
· <b>Vapour pressure at 20 °C:</b>	11.4 hPa
· <b>Density at 20 °C:</b>	1.05 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic at 25 °C:</b>	1.53 mPas
<b>Kinematic:</b>	Not determined.
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

(Contd. on page 6)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

Trade name: Acetic Acid Glacial

(Contd. of page 5)

- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- |  |                                |
|--|--------------------------------|
| · <b>UN-Number</b>   | UN2789                         |
| · <b>ADG, IMDG, IATA</b>   |                                |
| · <b>UN proper shipping name</b>   | 2789 ACETIC ACID, GLACIAL      |
| · <b>ADG</b>   | ACETIC ACID, GLACIAL           |
| · <b>IMDG, IATA</b>  |                                |
| · <b>Transport hazard class(es)</b>  |                                |
| · <b>ADG, IMDG, IATA</b>   |                                |
|  |                                |
| · <b>Class</b>   | 8 Corrosive substances.        |
| · <b>Label</b>   | 8+3                            |
| · <b>Packing group</b>   | II                             |
| · <b>ADG, IMDG, IATA</b>   |                                |
| · <b>Environmental hazards:</b>  |                                |
| · <b>Marine pollutant:</b>   | No                             |
| · <b>Special precautions for user</b>  | Warning: Corrosive substances. |
| · <b>Danger code (Kemler):</b>   | 83                             |
| · <b>EMS Number:</b>   | F-E,S-C                        |
| · <b>Segregation groups</b>  | Acids                          |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                |

(Contd. on page 7)

AU

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 6)

**· Transport/Additional information:****· ADG****· Limited quantities (LQ)**

1L

**· Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**· Transport category**

2

**· Tunnel restriction code**

D/E

**· IMDG****· Limited quantities (LQ)**

1L

**· Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**15 Regulatory information****· Safety, health and environmental regulations/legislation specific for the substance or mixture****· Australian Inventory of Chemical Substances** Substance is listed.**· Standard for the Uniform Scheduling of Medicines and Poisons**

64-19-7 | Acetic Acid Glacial

S2, S5, S6

**· Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

**· Code letter and hazard designation of product:**

Corrosive

**· Risk phrases:**

Flammable.

Causes severe burns.

**· Safety phrases:**

Keep locked up and out of the reach of children.

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.



# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

## 1 Identification

- **Product identifier**
- **Trade name:** Acetic Acid Glacial
- **Article number:** 10040, 10041
- **CAS Number:**  
64-19-7
- **EC number:**  
200-580-7
- **Index number:**  
607-002-00-6
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Corrosive

Causes severe burns.

Flammable.

- **Information concerning particular hazards for human and environment:** Not applicable.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

(Contd. on page 2)

CA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 1)

· **Code letter and hazard designation of product:**



Corrosive

· **Risk phrases:**

Flammable.  
Causes severe burns.

· **Safety phrases:**

Keep locked up and out of the reach of children.  
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· **Hazard description:**

· **WHMIS-symbols:**

B3 - Combustible liquid  
D2B - Toxic material causing other toxic effects  
E - Corrosive material



· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.  
· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

64-19-7 Acetic Acid Glacial

· **Identification number(s)**

· **EC number:** 200-580-7

· **Index number:** 607-002-00-6

CA

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 2)

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 3)

· **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.· **Control parameters**· **Components with limit values that require monitoring at the workplace:**

### 64-19-7 Acetic Acid Glacial

EL Short-term value: 15 ppm

Long-term value: 10 ppm

EV Short-term value: 37 mg/m<sup>3</sup>, 15 ppmLong-term value: 25 mg/m<sup>3</sup>, 10 ppm· **Additional information:** The lists that were valid during the creation were used as basis.· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

CA

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 4)

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Pungent
Odour threshold:	Not determined.

- pH-value (10 g/l) at 20 °C: 2.5

- **Change in condition**

Melting point/Melting range:	16.6 °C
Boiling point/Boiling range:	118 °C

- Flash point: 40 °C

- Flammability (solid, gaseous): Not flammable.

- Ignition temperature: 426 °C

- Decomposition temperature: Not determined.

- Auto igniting: Not determined.

- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower:	4 Vol %
Upper:	19 Vol %

- Vapor pressure at 20 °C: 11.4 hPa

Density at 20 °C:	1.05 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

- **Solubility in / Miscibility with**

Water:	Fully miscible.
--------	-----------------

- Partition coefficient (n-octanol/water): Not determined.

- **Viscosity:**

Dynamic at 25 °C:	1.53 mPas
Kinematic:	Not determined.

- Other information: No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Possibility of hazardous reactions** No dangerous reactions known.

- **Conditions to avoid** No further relevant information available.

- **Incompatible materials:** No further relevant information available.

(Contd. on page 6)

CA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 5)

· **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

· **Primary irritant effect:**

· **on the skin:** Strong caustic effect on skin and mucous membranes.

· **on the eye:** Strong caustic effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)** Substance is not listed.

· **NTP (National Toxicology Program)** Substance is not listed.

· **OSHA-Ca (Occupational Safety Health Administration)** Substance is not listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

CA

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS





Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 6)

## 14 Transport information

<b>· UN-Number</b>	UN2789
<b>· DOT, TDG, IMDG, IATA</b>	
<b>· UN proper shipping name</b>	Acetic acid, glacial
<b>· DOT</b>	2789 Acetic acid, glacial
<b>· TDG</b>	ACETIC ACID, GLACIAL
<b>· IMDG, IATA</b>	
<b>· Transport hazard class(es)</b>	
<b>· DOT</b>	
	
<b>· Class</b>	8 Corrosive substances
<b>· Label</b>	8+3
<b>· TDG, IMDG, IATA</b>	
	
<b>· Class</b>	8 Corrosive substances
<b>· Label</b>	8+3
<b>· Packing group</b>	II
<b>· DOT, TDG, IMDG, IATA</b>	
<b>· Environmental hazards:</b>	
<b>· Marine pollutant:</b>	No
<b>· Special precautions for user</b>	Warning: Corrosive substances
<b>· Danger code (Kemler):</b>	83
<b>· EMS Number:</b>	F-E,S-C
<b>· Segregation groups</b>	Acids
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· Transport/Additional information:</b>	
<b>· DOT</b>	
<b>· Quantity limitations</b>	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
<b>· Hazardous substance:</b>	5000 lbs, 2270 kg
<b>· TDG</b>	
<b>· Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<b>· IMDG</b>	
<b>· Limited quantities (LQ)</b>	1L
<b>· Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

(Contd. on page 8)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 05/26/2015

Reviewed on 05/26/2015

Trade name: Acetic Acid Glacial

(Contd. of page 7)

· UN "Model Regulation": UN2789, Acetic acid, glacial, 8 (3), II

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
- **Proposition 65**
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenic categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **Canadian substance listings:**
- **Canadian Domestic Substances List (DSL)** Substance is listed.
- **Canadian Ingredient Disclosure list (limit 0.1%)** Substance is not listed.
- **Canadian Ingredient Disclosure list (limit 1%)** Substance is listed.
- **Product related hazard informations:**  
The product has been classified and marked in accordance with directives on hazardous materials.
- **Hazard symbols:**



Corrosive

- **Risk phrases:**  
Flammable.  
Causes severe burns.
- **Safety phrases:**  
Keep locked up and out of the reach of children.  
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 05/26/2015 / -
- **Abbreviations and acronyms:**  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists

(Contd. on page 9)

CA



**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 05/26/2015

Reviewed on 05/26/2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 8)

*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*  
*WHMIS: Workplace Hazardous Materials Information System (Canada)*  
*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*

CA

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name:** Acetic Acid Glacial

· **Article number:** 10040, 10041

· **CAS Number:**

64-19-7

· **EC number:**

200-580-7

· **Index number:**

607-002-00-6

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

· **Further information obtainable from:** Product safety department

· **1.4 Emergency telephone number:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02



GHS05

· **Signal word** Danger

· **Hazard statements**

H226 Flammable liquid and vapour.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 1)

*H314 Causes severe skin burns and eye damage.***· Precautionary statements***P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P310 Immediately call a POISON CENTER/doctor.**P321 Specific treatment (see on this label).**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.1 Chemical characterisation: Substances****· CAS No. Description***64-19-7 Acetic Acid Glacial***· Identification number(s)****· EC number:** 200-580-7**· Index number:** 607-002-00-6**SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:** Immediately remove any clothing soiled by the product.**· After inhalation:** In case of unconsciousness place patient stably in side position for transportation.**· After skin contact:** Immediately wash with water and soap and rinse thoroughly.**· After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**· After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.**· 4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.**· 4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures****· 5.1 Extinguishing media****· Suitable extinguishing agents:***CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.***· 5.2 Special hazards arising from the substance or mixture** No further relevant information available.**· 5.3 Advice for firefighters****· Protective equipment:** No special measures required.**SECTION 6: Accidental release measures****· 6.1 Personal precautions, protective equipment and emergency procedures***Wear protective equipment. Keep unprotected persons away.*

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

Trade name: Acetic Acid Glacial

(Contd. of page 2)

- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

**Trade name: Acetic Acid Glacial**

(Contd. of page 3)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Fluid  
**Colour:** Colourless

- **Odour:** Pungent

- **Odour threshold:** Not determined.

- **pH-value (10 g/l) at 20 °C:** 2.5

- **Change in condition**

**Melting point/Melting range:** 16.6 °C

**Boiling point/Boiling range:** 118 °C

- **Flash point:** 40 °C

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 426 °C

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Not determined.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**

**Lower:** 4 Vol %

**Upper:** 19 Vol %

- **Vapour pressure at 20 °C:** 11.4 hPa

- **Density at 20 °C:** 1.05 g/cm<sup>3</sup>

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

Trade name: Acetic Acid Glacial

(Contd. of page 4)

- |   |  |
|---|--|
| · <b>Solubility in / Miscibility with water:</b>  | Fully miscible.                            |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| · <b>Viscosity:</b>                               |  |
| Dynamic at 25 °C:                                 | 1.53 mPas                                  |
| Kinematic:  | Not determined.                            |
| · <b>9.2 Other information</b>                    | No further relevant information available. |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 6)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

Trade name: Acetic Acid Glacial

(Contd. of page 5)

· 12.6 Other adverse effects No further relevant information available.

**SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

## · 14.1 UN-Number

· ADR, IMDG, IATA

UN2789

## · 14.2 UN proper shipping name

· ADR

2789 ACETIC ACID, GLACIAL

· IMDG, IATA

ACETIC ACID, GLACIAL

## · 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class

8 Corrosive substances.

· Label

8+3

## · 14.4 Packing group

· ADR, IMDG, IATA

II

## · 14.5 Environmental hazards:

· Marine pollutant:

No

## · 14.6 Special precautions for user

Warning: Corrosive substances.

· Danger code (Kemler):

83

· EMS Number:

F-E,S-C

· Segregation groups

Acids

## · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

## · Transport/Additional information:

· ADR

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· Transport category

2

· Tunnel restriction code

D/E

(Contd. on page 7)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.05.2015

Revision: 26.05.2015

Trade name: Acetic Acid Glacial

(Contd. of page 6)

- |                                   |  |
|-----------------------------------|--|
| · <b>IMDG</b>                     |  |
| · <b>Limited quantities (LQ)</b>  | 1L   |
| · <b>Excepted quantities (EQ)</b> | Code: E2   |
|                                   | Maximum net quantity per inner packaging: 30 ml  |
|                                   | Maximum net quantity per outer packaging: 500 ml |
| · <b>UN "Model Regulation":</b>   | UN2789, ACETIC ACID, GLACIAL, 8 (3), II          |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A



# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 26.05.2015

Herziening van: 26.05.2015

## RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** azijnzuur
- **Artikelnummer:** 10040, 10041
- **CAS-nummer:**  
64-19-7
- **EC-nummer:**  
200-580-7
- **Catalogusnummer:**  
607-002-00-6
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**  
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Aurion**  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: info@aurion.nl
- **Inlichtinggevendende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS02 vlam

Flam. Liq. 3 H226 Ontvlambare vloeistof en damp.



GHS05 corrosie

Skin Corr. 1A H314 Veroorzaakt ernstige brandwonden en oogletsel.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**  
De stof product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

(Vervolg op blz. 2)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 26.05.2015

Herziening van: 26.05.2015

**Handelsnaam: azijnzuur**

(Vervolg van blz. 1)

### · Gevarenpictogrammen



GHS02 GHS05

### · Signaalwoord Gevaar

### · Gevarenaanduidingen

H226 Ontvlambare vloeistof en damp.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

### · Voorzorgsmaatregelen

P303+P361+P353 **BIJ CONTACT MET DE HUID (of het haar):** verontreinigde kleding onmiddellijk uittrekken - huid met water afspoelen/afdouchen.

P305+P351+P338 **BIJ CONTACT MET DE OGEN:** voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.

P310 Onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.

P321 Specifieke behandeling vereist (zie op dit etiket).

P405 Achter slot bewaren.

P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

### · 2.3 Andere gevaren

### · Resultaten van PBT- en zPzB-beoordeling

· **PBT:** Niet bruikbaar.

· **zPzB:** Niet bruikbaar.

## RUBRIEK 3: Samenstelling en informatie over de bestanddelen

### · 3.1 Chemische karakterisering: Stoffen

#### · CAS-Nr. omschrijving

64-19-7 azijnzuur

#### · Identificatienummer(s)

· **EC-nummer:** 200-580-7

· **Catalogusnummer:** 607-002-00-6

## RUBRIEK 4: Eerstehulpmaatregelen

### · 4.1 Beschrijving van de eerstehulpmaatregelen

· **Algemene informatie:** Verontreinigde kleding onmiddellijk uittrekken.

· **Na het inademen:** Bij bewusteloosheid ligging en vervoer in stabiele zijligging.

· **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.

· **Na oogcontact:** Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.

· **Na inslikken:** Drink zeer veel water en voer verse lucht aan. Onmiddellijk een dokter waarschuwen.

· **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.

### · 4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling

Geen verdere relevante informatie verkrijgbaar.

NL

(Vervolg op blz. 3)

# Veiligheidsinformatieblad volgens 1907/2006/EG, Artikel 31

datum van de druk: 26.05.2015

Herziening van: 26.05.2015

Handelsnaam: azijnzuur

(Vervolg van blz. 2)

## RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**
- **Geschikte blusmiddelen:**  
CO<sub>2</sub>, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**  
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Geen bijzondere maatregelen nodig.

## RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures**  
Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.
- **6.2 Milieuvoorzorgsmaatregelen:**  
Met veel water verdunnen.  
Niet in de riolering/het oppervlaktewater/het grondwater laten terecht komen.
- **6.3 Insluitings- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
Neutralisatiemiddel gebruiken.  
Besmet materiaal zoals afval volgens punt 13 verwijderen.  
Voor voldoende ventilatie zorgen.
- **6.4 Verwijzing naar andere rubrieken**  
Informatie inzake veilig gebruik - zie hoofdstuk 7.  
Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.  
Informatie inzake berging - zie hoofdstuk 13.

## RUBRIEK 7: Hantering en opslag

- **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**  
Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.  
Aërosolvorming vermijden.
- **Informatie m.b.t. brand- en ontploffingsgevaar:**  
Onststekingsbronnen op afstand houden - niet roken.  
Maatregelen treffen tegen ontlading van statische elektriciteit.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

## RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **8.1 Controleparameters**
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:** Vervalt.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.

(Vervolg op blz. 4)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 26.05.2015

Herziening van: 26.05.2015

**Handelsnaam:** azijnzuur

(Vervolg van blz. 3)

- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**
  - Verwijderd houden van eet- en drinkwaren.
  - Verontreinigde kleding onmiddellijk uittrekken.
  - Vóór de pauze en aan het einde van werktijd handen wassen.
  - Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:**
  - Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingsstoestel gebruiken.
- **Handbescherming:**



Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.  
Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliën-mengsel afgegeven worden.  
Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

- **Handschoenmateriaal**
  - De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant.
- **Doordringingstijd van het handschoenmateriaal**
  - De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.
- **Oogbescherming:**



Nauw aansluitende veiligheidsbril

## RUBRIEK 9: Fysische en chemische eigenschappen

### · 9.1 Informatie over fysische en chemische basiseigenschappen

#### · Algemene gegevens

##### · Voorkomen:

Vorm:	Vloeibaar
Kleur:	Kleurloos
Reuk:	Stekend
Geurdrempelwaarde:	Niet bepaald.

· **pH-waarde (10 g/l) bij 20 °C:** 2,5

##### · Toestandsverandering

Smeltpunt/smeltbereik:	16,6 °C
Kookpunt/kookpuntbereik:	118 °C

· **Vlampunt:** 40 °C

· **Ontvlambaarheid (vast, gasvormig):** Niet bruikbaar.

· **Ontstekingstemperatuur:** 426 °C

· **Ontbindingstemperatuur:** Niet bepaald.

(Vervolg op blz. 5)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 26.05.2015

Herziening van: 26.05.2015

**Handelsnaam:** azijnzuur

(Vervolg van blz. 4)

· <b>Zelfonsteking:</b>	Niet bepaald.
· <b>Ontploffingsgevaar:</b>	Het produkt is niet ontploffingsgevaarlijk, maar de vorming van ontploffingsgevaarlijke damp-/luchtmengsels is mogelijk.
· <b>Ontploffingsgrenzen:</b>	
<b>Onderste:</b>	4 Vol %
<b>Bovenste:</b>	19 Vol %
· <b>Dampspanning bij 20 °C:</b>	11,4 hPa
· <b>Dichtheid bij 20 °C:</b>	1,05 g/cm <sup>3</sup>
· <b>Relatieve dichtheid</b>	Niet bepaald.
· <b>Dampdichtheid</b>	Niet bepaald.
· <b>Verdampingsnelheid</b>	Niet bepaald.
· <b>Oplosbaarheid in/mengbaarheid met Water:</b>	Volledig mengbaar.
· <b>Verdelingscoëfficiënt (n-octanol/water):</b>	Niet bepaald.
· <b>Viscositeit</b>	
<b>Dynamisch bij 25 °C:</b>	1,53 mPas
<b>Kinematisch:</b>	Niet bepaald.
· <b>9.2 Overige informatie</b>	Geen verdere relevante informatie verkrijgbaar.

## RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit**
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

## RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit:**

### Indelingsrelevantie LD/LC50-waarden:

Oraal	LD50	3310 mg/kg (rat)
Dermaal	LD50	1060 mg/kg (rabbit)

- **Primaire aandoening:**
- **op de huid:** Sterk bijtend effect op de huid en de slijmvliezen.
- **aan het oog:** Sterk bijtend effect.
- **Overgevoeligheid:** Geen effect van overgevoeligheid bekend.
- **Aanvullende toxicologische informatie:**  
Bij het slikken sterk bijtende effecten in de mondholte en de keel, bovendien gevaar voor perforatie van de slokdarm en de maag.

NL  
(Vervolg op blz. 6)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 26.05.2015

Herziening van: 26.05.2015

Handelsnaam: azijnzuur

(Vervolg van blz. 5)


### RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
 Waterbezwaarlijkheid (NL) 10: Kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken.  
 Gevaar voor water klasse 1 (D) (Lijstclassificatie): gevaar voor water klein  
 Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.  
 Mag niet onverdund of niet geneutraliseerd in oppervlaktewater of in afwateringskanaal geloosd worden.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.
- **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

- **14.1 VN-nummer**
- **ADR, IMDG, IATA** UN2789
- **14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN**
- **ADR** 2789 IJSAZIJN
- **IMDG, IATA** ACETIC ACID, GLACIAL
- **14.3 Transportgevarenklasse(n)**
- **ADR, IMDG, IATA**
- 
- **klasse** 8 Bijtende stoffen
- **Etiket** 8+3
- **14.4 Verpakkingsgroep:**
- **ADR, IMDG, IATA** II
- **14.5 Milieugevaren:**
- **Marine pollutant:** Neen
- **14.6 Bijzondere voorzorgen voor de gebruiker** Waarschuwing: Bijtende stoffen
- **Kemler-getal:** 83

(Vervolg op blz. 7)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 26.05.2015

Herziening van: 26.05.2015

**Handelsnaam:** azijnzuur

(Vervolg van blz. 6)

· <b>EMS-nummer:</b>	F-E,S-C
· <b>Segregation groups</b>	Acids
· <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij MARPOL 73/78 en de IBC-code</b>	Niet bruikbaar.
· <b>Transport/verdere gegevens:</b>	
· <b>ADR</b>	
· <b>Beperkte hoeveelheden (LQ)</b>	1L
· <b>Uitgezonderde hoeveelheden (EQ)</b>	Code: E2 Grootste netto hoeveelheid per binnenverpakking: 30 ml Grootste netto hoeveelheid per buitenverpakking: 500 ml
· <b>Vervoerscategorie</b>	2
· <b>Tunnelbeperkingscode</b>	D/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>VN "Model Regulation":</b>	UN2789, IJSAZIJN, 8 (3), II

## RUBRIEK 15: Regelgeving

- **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**
- **SZW-lijst van kankerverwekkende stoffen** De stof is niet aanwezig.
- **SZW-lijst van mutagene stoffen** De stof is niet aanwezig.
- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid** De stof is niet aanwezig.
- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling** De stof is niet aanwezig.
- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding** De stof is niet aanwezig.
- **Nationale voorschriften:**
- **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL) 10: Saneringsinspanning A
- **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

## RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

- **Afkortingen en acroniemen:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
Flam. Liq. 3: Flammable liquids, Hazard Category 3  
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 26.05.2015

Révision: 26.05.2015

### SECTION 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** acide acétique
- **Code du produit:** 10040, 10041
- **No CAS:**  
64-19-7
- **Numéro CE:**  
200-580-7
- **Numéro index:**  
607-002-00-6
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS02 flamme

Flam. Liq. 3 H226 Liquide et vapeurs inflammables.



GHS05 corrosion

Skin Corr. 1A H314 Provoque des brûlures de la peau et des lésions oculaires graves.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** La substance est classifiée et étiquetée selon le règlement CLP.
- **Pictogrammes de danger**



GHS02



GHS05

- **Mention d'avertissement** Danger
- **Mentions de danger**  
H226 Liquide et vapeurs inflammables.  
H314 Provoque des brûlures de la peau et des lésions oculaires graves.

(suite page 2)



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 26.05.2015

Révision: 26.05.2015

**Nom du produit: acide acétique**

(suite de la page 1)

- **Conseils de prudence**

P303+P361+P353 **EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux):** enlever immédiatement les vêtements contaminés. Rincer la peau à l'eau/se doucher.

P305+P351+P338 **EN CAS DE CONTACT AVEC LES YEUX:** rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

P310 Appeler immédiatement un CENTRE ANTIPOISON/un médecin.

P321 Traitement spécifique (voir sur cette étiquette).

P405 Garder sous clef.

P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

- **2.3 Autres dangers**

- **Résultats des évaluations PBT et vPvB**

- **PBT:** Non applicable.

- **vPvB:** Non applicable.

### SECTION 3: Composition/informations sur les composants

- **3.1 Caractérisation chimique: Substances**

- **No CAS Désignation**

64-19-7 acide acétique

- **Code(s) d'identification**

- **Numéro CE:** 200-580-7

- **Numéro index:** 607-002-00-6

### SECTION 4: Premiers secours

- **4.1 Description des premiers secours**

- **Remarques générales:** Enlever immédiatement les vêtements contaminés par le produit.

- **Après inhalation:** En cas d'inconscience, coucher et transporter la personne en position latérale stable.

- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.

- **Après contact avec les yeux:**

Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.

- **Après ingestion:** Boire de l'eau en abondance et donner de l'air frais. Consulter immédiatement un médecin.

- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.

- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**

Pas d'autres informations importantes disponibles.

### SECTION 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**

- **Moyens d'extinction:**

CO<sub>2</sub>, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.

- **5.2 Dangers particuliers résultant de la substance ou du mélange**

Pas d'autres informations importantes disponibles.

- **5.3 Conseils aux pompiers**

- **Équipement spécial de sécurité:** Aucune mesure particulière n'est requise.

FR

(suite page 3)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 26.05.2015

Révision: 26.05.2015

Nom du produit: acide acétique

(suite de la page 2)

### SECTION 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence**  
Porter un équipement de sécurité. Eloigner les personnes non protégées.
- **6.2 Précautions pour la protection de l'environnement:**  
Diluer avec beaucoup d'eau.  
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**  
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Utiliser un neutralisant.  
Evacuer les matériaux contaminés en tant que déchets conformément au point 13.  
Assurer une aération suffisante.
- **6.4 Référence à d'autres sections**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### SECTION 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Eviter la formation d'aérosols.
- **Préventions des incendies et des explosions:**  
Tenir à l'abri des sources d'inflammation - ne pas fumer.  
Prendre des mesures contre les charges électrostatiques.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

### SECTION 8: Contrôles de l'exposition/protection individuelle

- **Indications complémentaires pour l'agencement des installations techniques:**  
Sans autre indication, voir point 7.

#### · 8.1 Paramètres de contrôle

- **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

<b>64-19-7 acide acétique</b>
-------------------------------

VME	Valeur momentanée: 25 mg/m <sup>3</sup> , 10 ppm
-----	--

#### · Remarques supplémentaires:

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

#### · 8.2 Contrôles de l'exposition

##### · Equipement de protection individuel:

##### · Mesures générales de protection et d'hygiène:

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

(suite page 4)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 26.05.2015

Révision: 26.05.2015

Nom du produit: *acide acétique*

(suite de la page 3)

Eviter tout contact avec les yeux et avec la peau.

· **Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

· **Protection des mains:**



Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

· **Matériau des gants**

Le choix de gants appropriés ne dépend pas seulement du matériau, mais également d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre.

· **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

· **Protection des yeux:**



Lunettes de protection hermétiques

### SECTION 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**

· **Indications générales**

· **Aspect:**

<b>Forme:</b>	Liquide
<b>Couleur:</b>	Incolore
<b>Odeur:</b>	Piquante
<b>Seuil olfactif:</b>	Non déterminé.

· **valeur du pH (10 g/l) à 20 °C:** 2,5

· **Changement d'état**

<b>Point de fusion:</b>	16,6 °C
<b>Point d'ébullition:</b>	118 °C

· **Point d'éclair** 40 °C

· **Inflammabilité (solide, gazeux):** Non applicable.

· **Température d'inflammation:** 426 °C

· **Température de décomposition:** Non déterminé.

· **Auto-inflammation:** Non déterminé.

· **Danger d'explosion:** Le produit n'est pas explosif; toutefois, des mélanges explosifs vapeur-air peuvent se former.

· **Limites d'explosion:**

**Inférieure:** 4 Vol %

(suite page 5)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 26.05.2015

Révision: 26.05.2015

Nom du produit: acide acétique

(suite de la page 4)

<b>Supérieure:</b>	19 Vol %
· <b>Pression de vapeur à 20 °C:</b>	11,4 hPa
· <b>Densité à 20 °C:</b>	1,05 g/cm <sup>3</sup>
· <b>Densité relative</b>	Non déterminé.
· <b>Densité de vapeur.</b>	Non déterminé.
· <b>Vitesse d'évaporation</b>	Non déterminé.
· <b>Solubilité dans/miscibilité avec l'eau:</b>	Entièrement miscible
· <b>Coefficient de partage (n-octanol/eau):</b>	Non déterminé.
· <b>Viscosité:</b>	
<b>Dynamique à 25 °C:</b>	1,53 mPas
<b>Cinématique:</b>	Non déterminé.
· <b>9.2 Autres informations</b>	Pas d'autres informations importantes disponibles.

### SECTION 10: Stabilité et réactivité

- **10.1 Réactivité**
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.
- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

### SECTION 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë:**

#### · Valeurs LD/LC50 déterminantes pour la classification:

Oral	LD50	3310 mg/kg (rat)
Dermique	LD50	1060 mg/kg (lapin)

- **Effet primaire d'irritation:**
- **de la peau:** Effet fortement corrosif sur la peau et les muqueuses.
- **des yeux:** Effet fortement corrosif.
- **Sensibilisation:** Aucun effet de sensibilisation connu.
- **Indications toxicologiques complémentaires:**  
L'absorption orale du produit a un fort effet corrosif sur la cavité buccale et le pharynx et présente un danger de perforation du tube digestif et de l'estomac.

### SECTION 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.

(suite page 6)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 26.05.2015

Révision: 26.05.2015

**Nom du produit: acide acétique**



(suite de la page 5)

- **Autres indications écologiques:**
- **Indications générales:**  
*Catégorie de pollution des eaux 1 (D) (classification selon liste): peu polluant*  
*Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.*  
*Ne doit pas pénétrer à l'état non dilué ou non neutralisé dans les eaux usées ou le collecteur.*
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

### SECTION 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.
- **Produit de nettoyage recommandé:** Eau, éventuellement avec des produits de nettoyage

### SECTION 14: Informations relatives au transport

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 No ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN2789  |
| <ul style="list-style-type: none"> <li>· <b>14.2 Nom d'expédition des Nations unies</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>  | 2789 ACIDE ACÉTIQUE GLACIAL<br>ACETIC ACID, GLACIAL       |
| <ul style="list-style-type: none"> <li>· <b>14.3 Classe(s) de danger pour le transport</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | 8 Matières corrosives.<br>8+3                             |
| <div style="display: flex; align-items: center;">   </div> <ul style="list-style-type: none"> <li>· <b>Classe</b></li> <li>· <b>Étiquette</b></li> </ul> | 8 Matières corrosives.<br>8+3                             |
| <ul style="list-style-type: none"> <li>· <b>14.4 Groupe d'emballage</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | II  |
| <ul style="list-style-type: none"> <li>· <b>14.5 Dangers pour l'environnement:</b></li> <li>· <b>Marine Pollutant:</b></li> </ul>  | Non   |
| <ul style="list-style-type: none"> <li>· <b>14.6 Précautions particulières à prendre par l'utilisateur</b></li> <li>· <b>Indice Kemler:</b></li> <li>· <b>No EMS:</b></li> <li>· <b>Segregation groups</b></li> </ul>  | Attention: Matières corrosives.<br>83<br>F-E,S-C<br>Acids |
| <ul style="list-style-type: none"> <li>· <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol 73/78 et au recueil IBC</b></li> </ul>   | Non applicable.   |

(suite page 7)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 26.05.2015

Révision: 26.05.2015

Nom du produit: acide acétique

(suite de la page 6)

· **Indications complémentaires de transport:**

· **ADR**

· **Quantités limitées (LQ)**

1L

· **Quantités exceptées (EQ)**

Code: E2

Quantité maximale nette par emballage intérieur: 30 ml  
Quantité maximale nette par emballage extérieur: 500 ml

· **Catégorie de transport**

2

· **Code de restriction en tunnels**

D/E

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **"Règlement type" de l'ONU:**

UN2789, ACIDE ACÉTIQUE GLACIAL, 8 (3), II

### SECTION 15: Informations réglementaires

· **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**

*Pas d'autres informations importantes disponibles.*

· **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

### SECTION 16: Autres informations

*Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.*

· **Acronymes et abréviations:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31



Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

### ABSCHNITT 1: Bezeichnung des Stoffs bzw. des Gemischs und des Unternehmens

- **1.1 Produktidentifikator**
- **Handelsname:** Essigsäure
- **Artikelnummer:** 10040, 10041
- **CAS-Nummer:**  
64-19-7
- **EG-Nummer:**  
200-580-7
- **Indexnummer:**  
607-002-00-6
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com  
  
Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany  
Tel: +49(0)89 18 93 668-0  
safety@scienceservices.de  
  
24h Giftnotruf Munchen: +49 (0)89 19240  
Toxikologische Abteilung der II. Medizinischen Klinik  
rechts der Isar, Munchen. - www.toxinfo.org
- **Auskunftgebender Bereich:** Product safety department
- **1.4 Notrufnummer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### ABSCHNITT 2: Mögliche Gefahren

- **2.1 Einstufung des Stoffs oder Gemischs**
- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**
-  **GHS02 Flamme**  
Flam. Liq. 3 H226 Flüssigkeit und Dampf entzündbar.
-  **GHS05 Ätzwirkung**  
Skin Corr. 1A H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**  
Der Stoff ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

(Fortsetzung auf Seite 2)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

**Handelsname:** Essigsäure

(Fortsetzung von Seite 1)

### · Gefahrenpiktogramme



GHS02 GHS05

### · Signalwort Gefahr

### · Gefahrenhinweise

H226 Flüssigkeit und Dampf entzündbar.

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

### · Sicherheitshinweise

P303+P361+P353 BEI KONTAKT MIT DER HAUT (oder dem Haar): Alle beschmutzten, getränkten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen/duschen.

P305+P351+P338 BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

P310 Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.

P321 Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).

P405 Unter Verschluss aufbewahren.

P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

### · 2.3 Sonstige Gefahren

### · Ergebnisse der PBT- und vPvB-Beurteilung

· PBT: Nicht anwendbar.

· vPvB: Nicht anwendbar.

## ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

### · 3.1 Chemische Charakterisierung: Stoffe

#### · CAS-Nr. Bezeichnung

64-19-7 Essigsäure

#### · Identifikationsnummer(n)

· EG-Nummer: 200-580-7

· Indexnummer: 607-002-00-6

## ABSCHNITT 4: Erste-Hilfe-Maßnahmen

### · 4.1 Beschreibung der Erste-Hilfe-Maßnahmen

· **Allgemeine Hinweise:** Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.· **Nach Einatmen:** Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.· **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.

#### · Nach Augenkontakt:

Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.

· **Nach Verschlucken:** Reichlich Wasser nachtrinken und Frischluftzufuhr. Unverzüglich Arzt hinzuziehen.

### · 4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen

Keine weiteren relevanten Informationen verfügbar.

### · 4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung

Keine weiteren relevanten Informationen verfügbar.

DE

(Fortsetzung auf Seite 3)



# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

Handelsname: Essigsäure

(Fortsetzung von Seite 2)

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:**  
CO<sub>2</sub>, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Keine besonderen Maßnahmen erforderlich.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**  
Schutzausrüstung tragen. Ungeschützte Personen fernhalten.
- **6.2 Umweltschutzmaßnahmen:**  
Mit viel Wasser verdünnen.  
Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**  
Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.  
Neutralisationsmittel anwenden.  
Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.  
Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**  
Informationen zur sicheren Handhabung siehe Abschnitt 7.  
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.  
Informationen zur Entsorgung siehe Abschnitt 13.

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:**  
Zündquellen fernhalten - nicht rauchen.  
Maßnahmen gegen elektrostatische Aufladung treffen.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** Entzündlich
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.

(Fortsetzung auf Seite 4)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

**Handelsname:** Essigsäure

(Fortsetzung von Seite 3)

### · 8.1 Zu überwachende Parameter

#### · Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:

##### 64-19-7 Essigsäure

AGW	Langzeitwert: 25 mg/m <sup>3</sup> , 10 ml/m <sup>3</sup> 2(I);DFG, EU, Y
-----	--

· **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.

### · 8.2 Begrenzung und Überwachung der Exposition

#### · Persönliche Schutzausrüstung:

##### · Allgemeine Schutz- und Hygienemaßnahmen:

Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.

Beschmutzte, getränkte Kleidung sofort ausziehen.

Vor den Pausen und bei Arbeitsende Hände waschen.

Berührung mit den Augen und der Haut vermeiden.

##### · Atemschutz:

Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.

##### · Handschutz:



Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

##### · Handschuhmaterial

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich.

##### · Durchdringungszeit des Handschuhmaterials

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

##### · Augenschutz:



Dichtschließende Schutzbrille

## ABSCHNITT 9: Physikalische und chemische Eigenschaften

### · 9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften

#### · Allgemeine Angaben

##### · Aussehen:

**Form:** Flüssig

**Farbe:** Farblos

· **Geruch:** Stechend

· **Geruchsschwelle:** Nicht bestimmt.

· <b>pH-Wert (10 g/l) bei 20 °C:</b>	2,5
--------------------------------------	-----

(Fortsetzung auf Seite 5)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

**Handelsname:** Essigsäure

(Fortsetzung von Seite 4)

· <b>Zustandsänderung</b>	
<b>Schmelzpunkt/Schmelzbereich:</b>	16,6 °C
<b>Siedepunkt/Siedebereich:</b>	118 °C
· <b>Flammpunkt:</b>	40 °C
· <b>Entzündlichkeit (fest, gasförmig):</b>	Nicht anwendbar.
· <b>Zündtemperatur:</b>	426 °C
· <b>Zersetzungstemperatur:</b>	Nicht bestimmt.
· <b>Selbstentzündlichkeit:</b>	Nicht bestimmt.
· <b>Explosionsgefahr:</b>	Das Produkt ist nicht explosionsgefährlich, jedoch ist die Bildung explosionsgefährlicher Dampf-/Luftgemische möglich.
· <b>Explosionsgrenzen:</b>	
<b>Untere:</b>	4 Vol %
<b>Obere:</b>	19 Vol %
· <b>Dampfdruck bei 20 °C:</b>	11,4 hPa
· <b>Dichte bei 20 °C:</b>	1,05 g/cm <sup>3</sup>
· <b>Relative Dichte</b>	Nicht bestimmt.
· <b>Dampfdichte</b>	Nicht bestimmt.
· <b>Verdampfungsgeschwindigkeit</b>	Nicht bestimmt.
· <b>Löslichkeit in / Mischbarkeit mit Wasser:</b>	Vollständig mischbar.
· <b>Verteilungskoeffizient (n-Octanol/Wasser):</b>	Nicht bestimmt.
· <b>Viskosität:</b>	
<b>Dynamisch bei 25 °C:</b>	1,53 mPas
<b>Kinematisch:</b>	Nicht bestimmt.
· <b>9.2 Sonstige Angaben</b>	Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität**
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**  
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität:**

· <b>Einstufungsrelevante LD/LC50-Werte:</b>		
Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

(Fortsetzung auf Seite 6)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

**Handelsname:** Essigsäure

(Fortsetzung von Seite 5)

- **Primäre Reizwirkung:**
- **an der Haut:** Starke Ätzwirkung auf Haut und Schleimhäute.
- **am Auge:** Starke Ätzwirkung.
- **Sensibilisierung:** Keine sensibilisierende Wirkung bekannt.
- **Zusätzliche toxikologische Hinweise:**  
Bei Verschlucken starke Ätzwirkung des Mundraumes und Rachens sowie Gefahr der Perforation der Speiseröhre und des Magens.



### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
Wassergefährdungsklasse 1 (Listeneinstufung): schwach wassergefährdend  
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.  
Darf nicht unverdünnt bzw. unneutralisiert ins Abwasser bzw. in den Vorfluter gelangen.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

### ABSCHNITT 14: Angaben zum Transport

- |   |                      |
|---|----------------------|
| · <b>14.1 UN-Nummer</b>   | UN2789               |
| · <b>ADR, IMDG, IATA</b>  |                      |
| · <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b>  |                      |
| · <b>ADR</b>  | 2789 EISESSIG        |
| · <b>IMDG, IATA</b>   | ACETIC ACID, GLACIAL |
| · <b>14.3 Transportgefahrenklassen</b>  |                      |
| · <b>ADR, IMDG, IATA</b>  |                      |
|   |                      |
| · <b>Klasse</b>   | 8 Ätzende Stoffe     |

(Fortsetzung auf Seite 7)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

**Handelsname:** Essigsäure

(Fortsetzung von Seite 6)

· <b>Gefahrzettel</b>	8+3
· <b>14.4 Verpackungsgruppe</b> · <b>ADR, IMDG, IATA</b>	II
· <b>14.5 Umweltgefahren:</b> · <b>Marine pollutant:</b>	Nein
· <b>14.6 Besondere Vorsichtsmaßnahmen für den Verwender</b> · <b>Kemler-Zahl:</b> · <b>EMS-Nummer:</b> · <b>Segregation groups</b>	Achtung: Ätzende Stoffe 83 F-E,S-C Acids
· <b>14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens 73/78 und gemäß IBC-Code</b>	Nicht anwendbar.
· <b>Transport/weitere Angaben:</b>	
· <b>ADR</b> · <b>Begrenzte Menge (LQ)</b> · <b>Freigestellte Mengen (EQ)</b>	1L Code: E2 Höchste Nettomenge je Innenverpackung: 30 ml Höchste Nettomenge je Außenverpackung: 500 ml
· <b>Beförderungskategorie</b> · <b>Tunnelbeschränkungscode</b>	2 D/E
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN2789, EISESSIG, 8 (3), II

### ABSCHNITT 15: Rechtsvorschriften

· **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**

· **Nationale Vorschriften:**

· **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** Entzündlich

· **Technische Anleitung Luft:**

Klasse	Anteil in %
II	100,0

· **Wassergefährdungsklasse: WGK I (Listeneinstufung):** schwach wassergefährdend.

· **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

### ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

(Fortsetzung auf Seite 8)

**Sicherheitsdatenblatt**  
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 26.05.2015

überarbeitet am: 26.05.2015

**Handelsname: Essigsäure**

(Fortsetzung von Seite 7)

**· Abkürzungen und Akronyme:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonised System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*Flam. Liq. 3: Flammable liquids, Hazard Category 3*

*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*

DE

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 26.05.2015

Revisione: 26.05.2015

### SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** acido acetico

· **Articolo numero:** 10040, 10041

· **Numero CAS:**

64-19-7

· **Numeri CE:**

200-580-7

· **Numero indice:**

607-002-00-6

· **1.2 Usi pertinenti identificati della sostanza o miscela e usi sconsigliati** Non sono disponibili altre informazioni.

· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: www.sichim.com

· **Informazioni fornite da:** Product safety department

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**

· **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS02 fiamma

Flam. Liq. 3 H226 Liquido e vapori infiammabili.



GHS05 corrosione

Skin Corr. 1A H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

· **2.2 Elementi dell'etichetta**

· **Etichettatura secondo il regolamento (CE) n. 1272/2008**

La sostanza è classificata ed etichettata conformemente al regolamento CLP.

(continua a pagina 2)

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 26.05.2015

Revisione: 26.05.2015

**Denominazione commerciale: acido acetico**

(Segue da pagina 1)

**· Pittogrammi di pericolo**

GHS02 GHS05

**· Avvertenza Pericolo****· Indicazioni di pericolo**

H226 Liquido e vapori infiammabili.

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

**· Consigli di prudenza**P303+P361+P353 **IN CASO DI CONTATTO CON LA PELLE (o con i capelli):** togliersi di dosso immediatamente tutti gli indumenti contaminati. Sciacquare la pelle/fare una doccia.P305+P351+P338 **IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.

P310 Contattare immediatamente un CENTRO ANTIVELENI/un medico.

P321 Trattamento specifico (vedere su questa etichetta).

P405 Conservare sotto chiave.

P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

**· 2.3 Altri pericoli****· Risultati della valutazione PBT e vPvB**· **PBT:** Non applicabile.· **vPvB:** Non applicabile.**SEZIONE 3: Composizione/informazioni sugli ingredienti****· 3.1 Caratteristiche chimiche: Sostanze****· Numero CAS**

64-19-7 acido acetico

**· Numeroli di identificazione**· **Numeri CE:** 200-580-7· **Numero indice:** 607-002-00-6**SEZIONE 4: Misure di primo soccorso****· 4.1 Descrizione delle misure di primo soccorso**· **Indicazioni generali:** Allontanare immediatamente gli abiti contaminati dal prodotto.· **Inalazione:** Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.· **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.· **Contatto con gli occhi:**

Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.

· **Ingestione:**

Bere abbondante acqua e sostare in zona ben areata. Richiedere immediatamente l'intervento del medico.

· **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.· **4.3 Indicazione della eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**

Non sono disponibili altre informazioni.

(continua a pagina 3)



**Scheda di dati di sicurezza**  
**ai sensi del regolamento 1907/2006/CE, Articolo 31**

Stampato il: 26.05.2015

Revisione: 26.05.2015

**Denominazione commerciale: acido acetico**

(Segue da pagina 2)

### **SEZIONE 5: Misure antincendio**

- **5.1 Mezzi di estinzione**
- **Mezzi di estinzione idonei:**  
*CO<sub>2</sub>, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.*
- **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** *Non sono disponibili altre informazioni.*
- **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
- **Mezzi protettivi specifici:** *Non sono richiesti provvedimenti particolari.*

### **SEZIONE 6: Misure in caso di rilascio accidentale**

- **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza**  
*Indossare equipaggiamento protettivo. Allontanare le persone non equipaggiate.*
- **6.2 Precauzioni ambientali:**  
*Diluire abbondantemente con acqua.  
 Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.*
- **6.3 Metodi e materiali per il contenimento e per la bonifica:**  
*Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).  
 Utilizzare mezzi di neutralizzazione.  
 Smaltimento del materiale contaminato conformemente al punto 13.  
 Provvedere ad una sufficiente areazione.*
- **6.4 Riferimento ad altre sezioni**  
*Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.  
 Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.  
 Per informazioni relative allo smaltimento vedere Capitolo 13.*

### **SEZIONE 7: Manipolazione e immagazzinamento**

- **7.1 Precauzioni per la manipolazione sicura**  
*Accurata ventilazione/aspirazione nei luoghi di lavoro.  
 Evitare la formazione di aerosol.*
- **Indicazioni in caso di incendio ed esplosione:**  
*Tenere lontano da fonti di calore, non fumare.  
 Adottare provvedimenti contro cariche elettrostatiche.*
- **7.2 Condizioni per l'immagazzinamento sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** *Non sono richiesti requisiti particolari.*
- **Indicazioni sullo stoccaggio misto:** *Non necessario.*
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** *Mantenere i recipienti ermeticamente chiusi.*
- **7.3 Usi finali specifici** *Non sono disponibili altre informazioni.*

### **SEZIONE 8: Controllo dell'esposizione/protezione individuale**

- **Ulteriori indicazioni sulla struttura di impianti tecnici:** *Nessun dato ulteriore, vedere punto 7.*

(continua a pagina 4)

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 26.05.2015

Revisione: 26.05.2015

**Denominazione commerciale:** acido acetico

(Segue da pagina 3)

**· 8.1 Parametri di controllo****· Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:****64-19-7 acido acetico**TWA Valore a breve termine: 37 mg/m<sup>3</sup>, 15 ppmValore a lungo termine: 25 mg/m<sup>3</sup>, 10 ppm**· Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.**· 8.2 Controlli dell'esposizione****· Mezzi protettivi individuali:****· Norme generali protettive e di igiene del lavoro:**

Tenere lontano da cibo, bevande e foraggi.

Togliere immediatamente gli abiti contaminati.

Lavarsi le mani prima dell'intervallo o a lavoro terminato.

Evitare il contatto con gli occhi e la pelle.

**· Maschera protettiva:**

Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.

**· Guanti protettivi:**

Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.

A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.

Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

**· Materiale dei guanti**

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro.

**· Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

**· Occhiali protettivi:**

Occhiali protettivi a tenuta

**SEZIONE 9: Proprietà fisiche e chimiche****· 9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali****· Indicazioni generali****· Aspetto:****Forma:** Liquido**Colore:** Incolore**· Odore:** Pungente**· Soglia olfattiva:** Non definito.**· valori di pH (10 g/l) a 20 °C:** 2,5

(continua a pagina 5)

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 26.05.2015

Revisione: 26.05.2015

Denominazione commerciale: acido acetico

(Segue da pagina 4)

· <b>Cambiamento di stato</b> Temperatura di fusione/ambito di fusione:	16,6 °C
Temperatura di ebollizione/ambito di ebollizione:	118 °C
· <b>Punto di infiammabilità:</b>	40 °C
· <b>Infiammabilità (solido, gassoso):</b>	Non applicabile.
· <b>Temperatura di accensione:</b>	426 °C
· <b>Temperatura di decomposizione:</b>	Non definito.
· <b>Autoaccensione:</b>	Non definito.
· <b>Pericolo di esplosione:</b>	Prodotto non è esplosivo, è tuttavia possibile la formazione di miscele di vapori/aria esplosive.
· <b>Limiti di infiammabilità:</b> Inferiore:	4 Vol %
Superiore:	19 Vol %
· <b>Tensione di vapore a 20 °C:</b>	11,4 hPa
· <b>Densità a 20 °C:</b>	1,05 g/cm <sup>3</sup>
· <b>Densità relativa</b>	Non definito.
· <b>Densità del vapore</b>	Non definito.
· <b>Velocità di evaporazione</b>	Non definito.
· <b>Solubilità in/Miscibilità con acqua:</b>	Completamente miscibile.
· <b>Coefficiente di distribuzione (n-Octanol/acqua):</b>	Non definito.
· <b>Viscosità:</b> Dinamica a 25 °C:	1,53 mPas
Cinematica:	Non definito.
· <b>9.2 Altre informazioni</b>	Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

- **10.1 Reattività**
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta:**

· **Valori LD/LC50 rilevanti per la classificazione:**

Orale	LD50	3310 mg/kg (rat)
Cutaneo	LD50	1060 mg/kg (rabbit)

(continua a pagina 6)

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 26.05.2015

Revisione: 26.05.2015

**Denominazione commerciale:** acido acetico

(Segue da pagina 5)

- **Irritabilità primaria:**
- **sulla pelle:** Fortemente corrosivo sulla pelle e sulle mucose.
- **sugli occhi:** Fortemente corrosivo.
- **Sensibilizzazione:** Non si conoscono effetti sensibilizzanti.
- **Ulteriori dati tossicologici:**  
Se ingerito provoca forte corrosione della cavità orale e della faringe con rischio di perforazione dell'esofago e dello stomaco.


### SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
Pericolosità per le acque classe 1 (D) (Classif. secondo le liste): poco pericoloso  
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.  
Non immettere il prodotto non diluito o non neutralizzato nelle acque di scarico e nei canali di raccolta.
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.
- **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

### SEZIONE 14: Informazioni sul trasporto

- **14.1 Numero ONU**
- **ADR, IMDG, IATA** UN2789
- **14.2 Nome di spedizione dell'ONU**
- **ADR** 2789 ACIDO ACETICO GLACIALE
- **IMDG, IATA** ACETIC ACID, GLACIAL
- **14.3 Classi di pericolo connesso al trasporto**
- **ADR, IMDG, IATA**
- 
- **Classe** 8 Materie corrosive

(continua a pagina 7)

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 26.05.2015

Revisione: 26.05.2015

**Denominazione commerciale: acido acetico**

(Segue da pagina 6)

· Etichetta	8+3
· 14.4 Gruppo di imballaggio · ADR, IMDG, IATA	II
· 14.5 Pericoli per l'ambiente: · Marine pollutant:	No
· 14.6 Precauzioni speciali per gli utilizzatori · Numero Kemler: · Numero EMS: · Segregation groups	Attenzione: Materie corrosive 83 F-E,S-C Acids
· 14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL 73/78 ed il codice IBC	Non applicabile.
· <b>Trasporto/ulteriori indicazioni:</b>	
· ADR · Quantità limitate (LQ) · Quantità esenti (EQ)	1L Codice: E2 Quantità massima netta per imballaggio interno: 30 ml Quantità massima netta per imballaggio esterno: 500 ml
· Categoria di trasporto · Codice di restrizione in galleria	2 D/E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN2789, ACIDO ACETICO GLACIALE, 8 (3), II

### SEZIONE 15: Informazioni sulla regolamentazione

· 15.1 Norme e legislazione su salute, sicurezza e ambiente specifiche per la sostanza o la miscela

· Disposizioni nazionali:

· Istruzione tecnica aria:

Classe	quota in %
NC	100,0

· 15.2 Valutazione della sicurezza chimica: Una valutazione della sicurezza chimica non è stata effettuata.

### SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· **Abbreviazioni e acronimi:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

(continua a pagina 8)

**Scheda di dati di sicurezza**  
**ai sensi del regolamento 1907/2006/CE, Articolo 31**

Stampato il: 26.05.2015

Revisione: 26.05.2015

**Denominazione commerciale: acido acetico**

*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*

(Segue da pagina 7)

IT

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

### 1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명:** Acetic Acid Glacial
- **상품번호:** 10040, 10041
- **CAS-번호**  
64-19-7
- **EC 의번호:**  
200-580-7
- **색인 번호:**  
607-002-00-6
- **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
- **제품의 권고 용도와 사용상의 제한:** 실험실 화학품
- **안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보**
- **제조자/수입자/유통업자 정보:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- Samchang Commercial Co., Ltd.  
Yeo Eui Do  
PO Box 1110  
Seoul, Korea  
Tel: 82 2 703 3040  
Fax: 82 2 717 3298
- **추가적인 정보 획득 가능:** Product safety department
- **비상연락 전화번호:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 유해성.위험성

· **순물질 또는 혼합물의 분류**



화염

인화성 액체 구분3

H226 인화성 액체 및 증기



부식

피부 부식성/자극성 구분1 H314 피부에 심한 화상과 눈에 손상을 일으킴

· **라벨표기 요소**

· **GHS 라벨 요소**

본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

(2 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

**제품명: Acetic Acid Glacial**

(1 쪽부터계속)

**· 그림문자**



GHS02 GHS05

- **신호어 위험**
- **유해.위험 문구**  
인화성 액체 및 증기  
피부에 심한 화상과 눈에 손상을 일으킴
- **예방조치 문구**  
피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나제거하십시오. 피부를 물로 씻으시오/샤워하십시오.  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하십시오. 계속 씻으시오.  
즉시 독성물질센터/병원 연락 필요.  
(라벨 참조) 처치를 하시오.  
잠금장치가 있는 저장장소에 저장하십시오.  
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출
- **기타 유해성**
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

- **화 학 적 특 성:** 화학물질
- **CAS-번호표시**  
64-19-7 Acetic Acid Glacial
- **식별 번호**
- **EC 의번호:** 200-580-7
- **색인 번호:** 607-002-00-6

### 4 응급조치 요령

- **응급조치요령 내용**
- **일반 적 정보:** 이제품에 의해 오염된 의상은 즉시 제거 한다.
- **흡입했을 때:** 환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.
- **피부에 접촉했을 때:** 즉시물과비누로씻고잘행군다.
- **눈에 들어갔을 때:** 흐르는 물에 눈을 몇분동안 씻어내고나서, 의사와 상담한 다
- **먹었을 때:** 물을 충분히 마시고 신선한 공기를 쐬다. 즉시 의사의 도움을 구한다.
- **가장 중요한 급·만성 증상 및 영향** 추가적인 정보가 존재하지 않습니다.
- **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다.

### 5 폭발.화재시 대처방법

- **소화제**
- **적절한 소화제:**  
이산화탄소, 진화용 석회 가루 또는 물방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올 이 함유된 거품으로 끈다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.

(3 쪽에계속)



# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

**제품명:** Acetic Acid Glacial

(2 쪽부터계속)

- 소방관에 대한 권고사항
- 화재 진압 시 착용할 보호구 및 예방조치: 특별한 조치가 필요없음.

### 6 누출 사고 시 대처방법

- 개인적 예방조치, 보호장비 및 응급처치 절차 안전장비 착용하고, 무방비의 사람은 격리시킨다.
- 환경 관련 예방조치:  
많은 물로 희석시킨다.  
하수도망/해수면위의물/지하수로도달하지않게한다.
- 밀폐 및 정화 방법과 소재:  
액체가 혼합된 물질(모래, 규조토, 산성결합물, 일반결합물, 톱밥)에 흡입되도록 한다.  
중성제를사용한다.  
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.  
충분한 환기가 되도록 한다.
- 타 섹션 참조  
안전관리에 대한 정보는 제7 장을 참고하십시오.  
개인보호장비에 대한 정보는 제8 장을 참고하십시오.  
쓰레기처리에 대한 정보는 제13 장을 참고하십시오.

### 7 취급 및 저장방법

- 안전 취급을 위한 예방조치  
작업장에서는통풍이잘 되고/습기제거가잘 되게주의한다.  
연무질이형성되는것을피한다.
- 화재 및 폭발 사고 예방대책에 관한 정보:  
발화요소는 멀리둔다.금연.  
정전기의충전으로부터보호한다.
- 혼합위험성 등 안전 저장 조건
- 보관:  
· 안전한 저장 방법: 특별한 요구사항이 없음.  
· 하나의 공동 보관 시설에 대한 보관 관련 정보: 필요없음  
· 보관 조건에 관한 추가적인 정보: 용기를 새지않게밀폐한채보관한다.  
· 구체적인 최종 사용자 추가적인 정보가 존재하지 않습니다.

### 8 노출방지 및 개인보호구

- 첨단시설 디자인에 대한 추가정보: 더 이상 의 자료는 없음. 항목 7 을 참고하십시오.
- 통제 변수

· 화학물질의 노출기준, 생물학적 노출기준 등:

**64-19-7 Acetic Acid Glacial**

TLV (ROK)	단기간의값: 37 mg/m <sup>3</sup> , 15 ppm 장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
IOELV (EU)	장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
PEL (USA)	장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
REL (USA)	단기간의값: 37 mg/m <sup>3</sup> , 15 ppm 장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
TLV (USA)	단기간의값: 37 mg/m <sup>3</sup> , 15 ppm 장기간의값: 25 mg/m <sup>3</sup> , 10 ppm

(4 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

**제품명: Acetic Acid Glacial**

(3 쪽부터계속)

· **추 가 정보:** 제 조 할 당시에 유 효 한 목 록을 기초로 사용했다.

· **노출 통제**

· **개인 보호구**

· **일반적보호조치및위생조치:**

· 식료품, 음료수와 사료로부터 멀리떨어뜨려 놓는다.

· 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.

· 휴식 전 이나 작업이 끝날때마다 손을 씻는다.

· 눈과 피부와의 접촉은 피한다.

· **호흡기 보호:**

· 단 시간 또는 경미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장기간 노출시에는

· 호흡보호장비를 사용한다.

· **손 보호:**



보호용 장갑

장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.

테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.

투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

· **장갑의재료**

· 적합한장갑의선정은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업자에따라서도다르게선정되어야한다.

· **장갑 재료 의 투과 시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

· **눈 보호:**



팍조이는보안경

### 9 물리화학적 특성

· **기본 물리 및 화학적 특성에 대한 정보**

· **일반정보**

· **외형**

· **물리적 상태:** 액체의

· **색:** 색소가없는

· **냄새:** 찌르는듯한

· **후각역치** 알맞지않다.

· **pH (10 g/l) 의경우 20 °C:** 2.5

· **상태변화**

· **녹는점/어는점:** 16.6 °C

· **초기 끓는점과 끓는점 범위:** 118 °C

· **인화점:** 40 °C

· **인화성(고체, 기체):** 해당사항 없음.

· **점화온도:** 426 °C

· **분해 온도:** 알맞지않다.

(5 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

**제품명:** Acetic Acid Glacial

(4 쪽부터계속)

· 자기점화:	알맞지않다.
· 폭발위험:	이제품은폭발위험성이없지만, 폭발가능성이있는증기화합물/공기화합물의형성가능성이있다.
· 인화 또는 폭발 범위의 상한/하한 아래로:	4 Vol %
위로:	19 Vol %
· 증기압 의경우 20 °C:	11.4 hPa
· 밀도 의경우 20 °C:	1.05 g/cm <sup>3</sup>
· 비중:	알맞지않다.
· 증기밀도:	알맞지않다.
· 증발 속도:	알맞지않다.
· 용해도: 물:	완전히혼합할수있는
· n 옥탄올/물 분배계수:	알맞지않다.
· 점도: 역학적 의경우 25 °C:	1.53 mPas
· 동점성:	알맞지않다.
· 기타 정보	추가적인 정보가 존재하지 않습니다.

### 10 안정성 및 반응성

- 반응성
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한 반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성있는분해물들은알려지지않았다.

### 11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:

· LD/LC50-수치에 따른 분류:

구강의	LD50	3310 mg/kg (rat)
피부의	LD50	1060 mg/kg (rabbit)

- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 피부와점막에강한부식작용.
- 심한 눈 손상 또는 자극성: 강한부식작용
- 감각화: 민감한영향이없는것으로알려져있다.
- 추가적인 독성에 관한 정보:  
삼킬경우 식도나위등의내장기관벽에상처를주는위험과 마찬가지로입 주변이나구강에강한부식작용을한다

KR  
(6 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

**제품명:** Acetic Acid Glacial

(5 쪽부터계속)


### 12 환경에 미치는 영향

- **독성**
- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **추가적인 생태학 정보:**
- **일반 특징:**  
 수질오염등급 1 (목록분류): 약하게수질오염이된  
 희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.  
 희석시키지않은채또는중화시키지않은채하수도나배수로에도달하지않게해야한다.
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.
- **기타 부작용** 추가적인 정보가 존재하지 않습니다.

### 13 폐기시 주의사항

- **폐기물 처리 방법**
- **권고:** 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- **비위생적 포장:**
- **권고:** 당국의지침에입각한쓰레기처리.
- **추천 세정제:** 경우에따라서세제가첨가된물

### 14 운송에 필요한 정보

<ul style="list-style-type: none"> <li>· <b>유엔 번호</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>	<p style="text-align: center;">UN2789</p>
<ul style="list-style-type: none"> <li>· <b>UN 적정 선적명</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>	<p style="text-align: center;">2789 ACETIC ACID, GLACIAL ACETIC ACID, GLACIAL</p>
<ul style="list-style-type: none"> <li>· <b>교통 위험 클래스</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul> <div style="text-align: center;">  </div>	<p style="text-align: center;">8 부식작용하는물질 8+3</p>
<ul style="list-style-type: none"> <li>· <b>등급</b></li> <li>· <b>위험물 라벨</b></li> </ul>	<p style="text-align: center;">II</p>
<ul style="list-style-type: none"> <li>· <b>용기등급</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>	<p style="text-align: center;">II</p>
<ul style="list-style-type: none"> <li>· <b>환경적 유해물질:</b></li> <li>· <b>해양오염물질:</b></li> </ul>	<p style="text-align: center;">아니오</p>
<ul style="list-style-type: none"> <li>· <b>이용자 특별 예방조치</b></li> <li>· <b>위험 코드:</b></li> <li>· <b>EMS-번호:</b></li> </ul>	<p style="text-align: center;">경고: 부식작용하는물질 83 F-E,S-C</p>

(7 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

**제품명:** Acetic Acid Glacial

(6 쪽부터계속)

<ul style="list-style-type: none"> <li>· Segregation groups</li> </ul>	<p>Acids</p>
<ul style="list-style-type: none"> <li>· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송</li> </ul>	<p>해당사항 없음.</p>
· 운 송/추가 정보:	
<ul style="list-style-type: none"> <li>· ADR</li> <li>· 한정 수량 (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· 운송 구분</li> <li>· 터널 제한 코드</li> </ul>	<p>2 D/E</p>
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· UN "모범 규제":</li> </ul>	<p>UN2789, ACETIC ACID, GLACIAL, 8 (3), II</p>

### 15 법적 규제현황

· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률

· Korean Existing Chemical Inventory		
64-19-7	Acetic Acid Glacial	KE-00013

· GHS 라벨 요소  
본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

· 위험 도표



GHS02    GHS05

· 표지어 위험

· 위험 문구

인화성 액체 및 증기  
피부에 심한 화상과 눈에 손상을 일으킴

· 주의 문구

피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나제거하십시오. 피부를 물로 씻으시오/샤워하십시오.  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하십시오. 계속 씻으시오.

즉시 독성물질센터/병원 연락 필요.

(라벨 참조) 처치를 하시오.

잠금장치가 있는 저장장소에 저장하십시오.

현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

· 화학물질 안전성 평가: 화학물질 안전성 평가가 수행되지 않음

KR

(8 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.05.26

개정: 2015.05.26

**제품명: Acetic Acid Glacial**

(7 쪽부터계속)

### 16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은  
기술했지않았으며계약적인법률관계에기반을두고있지도않다

- **최초 작성일자:** 2015.05.26
- **개정 횟수 및 최종 개정일자:** 1 / 2015.05.26
- **약어와 두문자어:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

인화성 액체 구분3: Flammable liquids, Hazard Category 3

피부 부식성/자극성 구분1: Skin corrosion/irritation, Hazard Category 1

KR

**Ficha de dados de segurança**  
**Em conformidade com 1907/2006/CE, Artigo 31.º**

data da impressão 26.05.2015

Revisão: 26.05.2015

### SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** ácido acético
- **Código do produto:** 10040, 10041
- **Nº CAS:**  
64-19-7
- **Número CE:**  
200-580-7
- **Número de índice:**  
607-002-00-6
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**  
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS02 chama

Flam. Liq. 3 H226 Líquido e vapor inflamáveis.



GHS05 corrosão

Skin Corr. 1A H314 Provoca queimaduras na pele e lesões oculares graves.

- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008**  
A substância classificou-se e está etiquetado em conformidade com o regulamento CLP.
- **Pictogramas de perigo**



GHS02



GHS05

- **Palavra-sinal** Perigo
- **Frases de perigo**  
H226 Líquido e vapor inflamáveis.

(continuação na página 2)

# Ficha de dados de segurança

## Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 26.05.2015

Revisão: 26.05.2015

Nome comercial: ácido acético

(continuação da página 1)

H314 Provoca queimaduras na pele e lesões oculares graves.

· **Frases de prudência**

P303+P361+P353 SE ENTRAR EM CONTACTO COM A PELE (ou o cabelo): despir/retirar imediatamente toda a roupa contaminada. Enxaguar a pele com água/tomar um duche.

P305+P351+P338 SE ENTRAR EM CONTACTO COM OS OLHOS: enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continuar a enxaguar.

P310 Contacte imediatamente um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.

P321 Tratamento específico (ver no presente rótulo).

P405 Armazenar em local fechado à chave.

P501 Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.

· **2.3 Outros perigos**

· **Resultados da avaliação PBT e mPmB**

· **PBT:** Não aplicável.

· **mPmB:** Não aplicável.

### SECÇÃO 3: Composição/informação sobre os componentes

· **3.1 Caracterização química: Substâncias**

· **Designação CAS n.º**

64-19-7 ácido acético

· **Número(s) de identificação**

· **Número CE:** 200-580-7

· **Número de índice:** 607-002-00-6

### SECÇÃO 4: Primeiros socorros

· **4.1 Descrição das medidas de primeiros socorros**

· **Indicações gerais:** O vestuário contaminado com substâncias perigosas deve ser imediatamente removido.

· **Em caso de inalação:**

Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.

· **Em caso de contacto com a pele:** Lavar imediatamente com água e sabão e enxaguar abundantemente.

· **Em caso de contacto com os olhos:**

Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas, e consultar o médico.

· **Em caso de ingestão:** Beber bastante água e respirar ar fresco. Consultar imediatamente um médico.

· **4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados**

Não existe mais nenhuma informação relevante disponível.

· **4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**

Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 5: Medidas de combate a incêndios

· **5.1 Meios de extinção**

· **Meios adequados de extinção:**

CO<sub>2</sub>, pó extintor ou jacto de água. Um incêndio de grandes dimensões deve ser combatido com jacto de água ou espuma resistente ao álcool.

· **5.2 Perigos especiais decorrentes da substância ou mistura**

Não existe mais nenhuma informação relevante disponível.

(continuação na página 3)



# Ficha de dados de segurança

## Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 26.05.2015

Revisão: 26.05.2015

Nome comercial: ácido acético

( continuação da página 2 )

- **5.3 Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** Não são necessárias medidas especiais.

### SECÇÃO 6: Medidas a tomar em caso de fugas acidentais

- **6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência**  
Usar equipamento de protecção. Manter as pessoas desprotegidas afastadas.
- **6.2 Precauções a nível ambiental:**  
Diluir em bastante água.  
Evitar que penetre na canalização / águas superficiais / águas subterrâneas.
- **6.3 Métodos e materiais de confinamento e limpeza:**  
Recolher com produtos que absorvam líquidos (areia, seixos, absorventes universais, serradura ).  
Aplicar um agente de neutralização.  
Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.  
Assegurar uma ventilação adequada.
- **6.4 Remissão para outras secções**  
Para informações sobre uma manipulação segura, ver o capítulo 7.  
Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.  
Para informações referentes à eliminação residual, ver o capítulo 13.

### SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro**  
Assegurar uma boa ventilação / exaustão no local de trabalho.  
Evitar a formação de aerossóis.
- **Precauções para prevenir incêndios e explosões:**  
Manter afastado de fontes de ignição - não fumar.  
Proteger contra descargas electrostáticas.
- **7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades**
- **Armazenagem:**
- **Requisitos para espaços ou contentores para armazenagem:** Sem requisitos especiais.
- **Avisos para armazenagem conjunta:** Não necessário.
- **Outros avisos sobre as condições de armazenagem:** Manter o recipiente hermeticamente fechado.
- **7.3 Utilizações finais específicas** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 8: Controlo da exposição/protecção individual

- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.

#### · 8.1 Parâmetros de controlo

- **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:**

#### 64-19-7 ácido acético

VLE	Valor para exposição curta: 15 ppm Valor para exposição longa: 10 ppm Irritação ocular e do TRS; função respiratória
-----	--

- **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.

#### · 8.2 Controlo da exposição

- **Equipamento de protecção individual:**
- **Medidas gerais de protecção e higiene:**  
Manter afastado de alimentos, bebidas e forragens.

( continuação na página 4 )

# Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 26.05.2015

Revisão: 26.05.2015

Nome comercial: ácido acético

( continuação da página 3 )

Despir imediatamente a roupa contaminada e embebida.

Lavar as mãos antes das pausas e no fim do trabalho.

Evitar o contacto com os olhos e com a pele.

· **Protecção respiratória:**

Utilizar uma máscara respiratória se a exposição for reduzida ou durante um curto espaço de tempo; se esta for mais prolongada ou mais intensa, utilizar uma máscara respiratória independente do ar ambiente.

· **Protecção das mãos:**



Luvas de protecção

O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.

Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.

Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.

· **Material das luvas**

A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante.

· **Tempo de penetração no material das luvas**

Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.

· **Protecção dos olhos:**



Óculos de protecção totalmente fechados

## SECÇÃO 9: Propriedades físicas e químicas

· **9.1 Informações sobre propriedades físicas e químicas de base**

· **Informações gerais**

· **Aspecto:**

Forma: Líquido

Cor: Incolor

· **Odor:** Agudo

· **Limiar olfactivo:** Não classificado.

· **valor pH (10 g/l) em 20 °C:** 2,5

· **Mudança do estado:**

Ponto / intervalo de fusão: 16,6 °C

Ponto / intervalo de ebulição: 118 °C

· **Ponto de inflamação:** 40 °C

· **Inflamabilidade (sólido, gás):** Não aplicável.

· **Temperatura de ignição:** 426 °C

· **Temperatura de decomposição:** Não classificado.

· **Auto-inflamabilidade:** Não classificado.

· **Perigos de explosão:** O produto não é explosivo. Contudo, é possível a formação de misturas explosivas ar/vapor.

( continuação na página 5 )

# Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 26.05.2015

Revisão: 26.05.2015

Nome comercial: ácido acético

(continuação da página 4)

· <b>Limites de explosão:</b>	
Inferior:	4 Vol %
Superior:	19 Vol %
· <b>Pressão de vapor em 20 °C:</b> 11,4 hPa	
· <b>Densidade em 20 °C:</b> 1,05 g/cm <sup>3</sup>	
· <b>Densidade relativa</b> Não classificado.	
· <b>Densidade de vapor</b> Não classificado.	
· <b>Velocidade de evaporação</b> Não classificado.	
· <b>Solubilidade em / miscibilidade com água:</b> Completamente misturável.	
· <b>Coefficiente de distribuição (n-octanol/água):</b> Não classificado.	
· <b>Viscosidade:</b>	
Dinâmico em 25 °C:	1,53 mPas
Cinmático:	Não classificado.
· <b>9.2 Outras informações</b> Não existe mais nenhuma informação relevante disponível.	

## SECÇÃO 10: Estabilidade e reactividade

- **10.1 Reactividade**
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** Não existe decomposição se usado de acordo com as especificações.
- **10.3 Possibilidade de reacções perigosas** Não se conhecem reacções perigosas.
- **10.4 Condições a evitar** Não existe mais nenhuma informação relevante disponível.
- **10.5 Materiais incompatíveis:** Não existe mais nenhuma informação relevante disponível.
- **10.6 Produtos de decomposição perigosos:** Não se conhecem produtos de decomposição perigosos.

## SECÇÃO 11: Informação toxicológica

- **11.1 Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda:**

· **Valores LD/LC50 relevantes para a classificação:**

por via oral	LD50	3310 mg/kg (rat)
por via dérmica	LD50	1060 mg/kg (rabbit)

- **Efeito de irritabilidade primário:**
- **sobre a pele:** Forte efeito corrosivo na pele e nas mucosas.
- **sobre os olhos:** Forte efeito corrosivo.
- **sensibilização:** Não são conhecidos efeitos sensibilizantes.
- **Avisos adicionais de toxicologia:**  
Em caso de ingestão surgem fortes efeitos corrosivos na boca e na garganta, existindo ainda o risco de perfuração do esófago e do estômago.

## SECÇÃO 12: Informação ecológica

- **12.1 Toxicidade**
- **Toxicidade aquática:** Não existe mais nenhuma informação relevante disponível.
- **12.2 Persistência e degradabilidade** Não existe mais nenhuma informação relevante disponível.

(continuação na página 6)

# Ficha de dados de segurança

## Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 26.05.2015

Revisão: 26.05.2015

Nome comercial: ácido acético


(continuação da página 5)

- **12.3 Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **12.4 Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Outras indicações ecológicas:**
- **Indicações gerais:**  
Classe de perigo para a água 1 (D) (classificação pelas listas): pouco perigoso para a água  
Não deixar chegar substâncias concentradas, ou seja quantidades grandes, às águas subterrâneas, aos cursos de água ou à canalização.  
Substâncias concentradas, ou seja não neutralizadas, não podem chegar aos esgotos nem às águas.
- **12.5 Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.
- **12.6 Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 13: Considerações relativas à eliminação

- **13.1 Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.
- **Meio de limpeza recomendado:** Água, eventualmente com adição de produtos de limpeza

### SECÇÃO 14: Informações relativas ao transporte

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 N° UN</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | UN2789   |
| <ul style="list-style-type: none"> <li>· <b>14.2 Designação oficial de transporte da ONU</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>   | 2789 ÁCIDO ACÉTICO GLACIAL<br>ACETIC ACID, GLACIAL     |
| <ul style="list-style-type: none"> <li>· <b>14.3 Classes de perigo para efeitos de transporte</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   |  |
|   |  |
| <ul style="list-style-type: none"> <li>· <b>Classe</b></li> <li>· <b>Rótulo</b></li> </ul>   | 8 Matérias corrosivas<br>8+3                           |
| <ul style="list-style-type: none"> <li>· <b>14.4 Tipo de embalagem</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | II   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Perigos para o ambiente:</b></li> <li>· <b>Poluente das águas:</b></li> </ul>   | Não  |
| <ul style="list-style-type: none"> <li>· <b>14.6 Precauções especiais para o utilizador</b></li> <li>· <b>N° Kemler:</b></li> <li>· <b>N° EMS:</b></li> <li>· <b>Segregation groups</b></li> </ul> | Atenção: Matérias corrosivas<br>83<br>F-E,S-C<br>Acids |
| <ul style="list-style-type: none"> <li>· <b>14.7 Transporte a granel em conformidade com o anexo II da Convenção Marpol 73/78 e o Código IBC</b> Não aplicável.</li> </ul>                         |  |

(continuação na página 7)

**Ficha de dados de segurança**  
**Em conformidade com 1907/2006/CE, Artigo 31.º**

data da impressão 26.05.2015

Revisão: 26.05.2015

**Nome comercial: ácido acético**

( continuação da página 6 )

**· Transporte/outras informações:****· ADR****· Quantidades Limitadas (LQ)**

1L

**· Quantidades exceptuadas (EQ)**

Código: E2

Quantidade líquida máxima por embalagem interior: 30 ml

Quantidade líquida máxima por embalagem exterior: 500 ml

**· Categoria de transporte**

2

**· Código de restrição em túneis**

D/E

**· IMDG****· Limited quantities (LQ)**

1L

**· Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**· UN "Model Regulation":**

UN2789, ÁCIDO ACÉTICO GLACIAL, 8 (3), II

**SECÇÃO 15: Informação sobre regulamentação****· 15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**

Não existe mais nenhuma informação relevante disponível.

**· 15.2 Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.**SECÇÃO 16: Outras informações**

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

**· Abreviaturas e acrónimos:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 26.05.2015

Revisión: 26.05.2015

### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **1.1 Identificador del producto**
- **Nombre comercial:** ácido acético
- **Número del artículo:** 10040, 10041
- **Número CAS:**  
64-19-7
- **Número CE:**  
200-580-7
- **Número de clasificación:**  
607-002-00-6
- **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**  
No existen más datos relevantes disponibles.
- **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio
- **1.3 Datos del proveedor de la ficha de datos de seguridad**
- **Fabricante/distribuidor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Aname**  
C/ Perez Galdos no. 2  
28693 Quijorna  
Madrid, Spain  
Tel: +34.91.816.89.50  
Fax: +34.91.816.85.94  
email: ventas@aname.es
- **Área de información:** Product safety department
- **1.4 Teléfono de emergencia:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECCIÓN 2: Identificación de los peligros

- **2.1 Clasificación de la sustancia o de la mezcla**
- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS02 llama

Flam. Liq. 3 H226 Líquidos y vapores inflamables.



GHS05 corrosión

Skin Corr. 1A H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

- **2.2 Elementos de la etiqueta**
- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**  
La sustancia se ha clasificado y etiquetado de conformidad con el reglamento CLP.

( se continua en página 2 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 26.05.2015

Revisión: 26.05.2015

Nombre comercial: ácido acético

( se continua en página 1 )

· **Pictogramas de peligro**

GHS02 GHS05

· **Palabra de advertencia Peligro**· **Indicaciones de peligro**

H226 Líquidos y vapores inflamables.

H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

· **Consejos de prudencia**P303+P361+P353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): *Quitarse inmediatamente las prendas contaminadas. Aclararse la piel con agua o ducharse.*P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: *Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.*P310 *Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/médico.*P321 *Se necesita un tratamiento específico (ver en esta etiqueta).*P405 *Guardar bajo llave.*P501 *Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.*· **2.3 Otros peligros**· **Resultados de la valoración PBT y mPmB**· **PBT:** No aplicable.· **mPmB:** No aplicable.

### SECCIÓN 3: Composición/información sobre los componentes

· **3.1 Caracterización química: Sustancias**· **Denominación N° CAS**

64-19-7 ácido acético

· **Número(s) de identificación**· **Número CE:** 200-580-7· **Número de clasificación:** 607-002-00-6

### SECCIÓN 4: Primeros auxilios

· **4.1 Descripción de los primeros auxilios**· **Instrucciones generales:** *Quitarse de inmediato toda prenda contaminada con el producto.*· **En caso de inhalación del producto:***Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.*· **En caso de contacto con la piel:** *Lavar inmediatamente con agua y jabón y enjuagar bien.*· **En caso de con los ojos:***Limpia los ojos abiertos durante varios minutos con agua corriente y consultar un médico.*· **En caso de ingestión:** *Beber mucha agua a respirar aire fresco. Solicitar asistencia médica inmediatamente.*· **4.2 Principales síntomas y efectos, agudos y retardados** *No existen más datos relevantes disponibles.*· **4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente***No existen más datos relevantes disponibles.*

ES

( se continua en página 3 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 26.05.2015

Revisión: 26.05.2015

Nombre comercial: ácido acético

( se continua en página 2 )

### SECCIÓN 5: Medidas de lucha contra incendios

- **5.1 Medios de extinción**
- **Sustancias extintoras apropiadas:**  
CO<sub>2</sub>, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.
- **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.
- **5.3 Recomendaciones para el personal de lucha contra incendios**
- **Equipo especial de protección:** No se requieren medidas especiales.

### SECCIÓN 6: Medidas en caso de vertido accidental

- **6.1 Precauciones personales, equipo de protección y procedimientos de emergencia**  
Llevar puesto equipo de protección. Mantener alejadas las personas sin protección.
- **6.2 Precauciones relativas al medio ambiente:**  
Diluir con mucha agua.  
Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.
- **6.3 Métodos y material de contención y de limpieza:**  
Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).  
Utilizar un neutralizador.  
Desechar el material contaminado como vertido según item 13.  
Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**  
Ver capítulo 7 para mayor información sobre una manipulación segura.  
Ver capítulo 8 para mayor información sobre el equipo personal de protección.  
Para mayor información sobre cómo desechar el producto, ver capítulo 13.

### SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura**  
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.  
Evitar la formación de aerosoles.
- **Prevención de incendios y explosiones:**  
Mantener alejadas las fuentes de encendido. No fumar.  
Tomar medidas contra las cargas electrostáticas.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

### SECCIÓN 8: Controles de exposición/protección individual

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
Sin datos adicionales, ver punto 7.

( se continua en página 4 )



# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 26.05.2015

Revisión: 26.05.2015

Nombre comercial: ácido acético

( se continua en página 3 )

### · 8.1 Parámetros de control

#### · Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:

##### 64-19-7 ácido acético

LEP	Valor de corta duración: 37 mg/m <sup>3</sup> , 15 ppm
	Valor de larga duración: 25 mg/m <sup>3</sup> , 10 ppm

· **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.

### · 8.2 Controles de la exposición

#### · Equipo de protección individual:

#### · Medidas generales de protección e higiene:

Mantener alejado de alimentos, bebidas y alimentos para animales.

Quitarse de inmediato la ropa ensuciada o impregnada.

Lavarse las manos antes de las pausas y al final del trabajo.

Evitar el contacto con los ojos y la piel.

#### · Protección respiratoria:

Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.

#### · Protección de manos:



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

#### · Material de los guantes

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro.

#### · Tiempo de penetración del material de los guantes

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

#### · Protección de ojos:



Gafas de protección herméticas

## SECCIÓN 9: Propiedades físicas y químicas

### · 9.1 Información sobre propiedades físicas y químicas básicas

#### · Datos generales

#### · Aspecto:

Forma: Líquido

Color: Incoloro

· Olor: Penetrante

· Umbral olfativo: No determinado.

· valor pH (10 g/l) a 20 °C: 2,5

( se continua en página 5 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 26.05.2015

Revisión: 26.05.2015

Nombre comercial: ácido acético

( se continua en página 4 )

· Cambio de estado	
Punto de fusión /campo de fusión:	16,6 °C
Punto de ebullición /campo de ebullición:	118 °C
· Punto de inflamación:	40 °C
· Inflamabilidad (sólido, gaseiforme):	No aplicable.
· Temperatura de ignición:	426 °C
· Temperatura de descomposición:	No determinado.
· Autoinflamabilidad:	No determinado.
· Peligro de explosión:	El producto no es explosivo; sin embargo, pueden formarse mezclas explosivas de vapor / aire.
· Límites de explosión:	
Inferior:	4 Vol %
Superior:	19 Vol %
· Presión de vapor a 20 °C:	11,4 hPa
· Densidad a 20 °C:	1,05 g/cm <sup>3</sup>
· Densidad relativa	No determinado.
· Densidad de vapor	No determinado.
· Velocidad de evaporación	No determinado.
· Solubilidad en / miscibilidad con agua:	Completamente mezclable.
· Coeficiente de reparto (n-octanol/agua):	No determinado.
· Viscosidad:	
Dinámica a 25 °C:	1,53 mPas
Cinemática:	No determinado.
· 9.2 Información adicional	No existen más datos relevantes disponibles.

### SECCIÓN 10: Estabilidad y reactividad

- 10.1 Reactividad
- 10.2 Estabilidad química
- Descomposición térmica / condiciones que deben evitarse: No se descompone al emplearse adecuadamente.
- 10.3 Posibilidad de reacciones peligrosas No se conocen reacciones peligrosas.
- 10.4 Condiciones que deben evitarse No existen más datos relevantes disponibles.
- 10.5 Materiales incompatibles: No existen más datos relevantes disponibles.
- 10.6 Productos de descomposición peligrosos: No se conocen productos de descomposición peligrosos.

### SECCIÓN 11: Información toxicológica

- 11.1 Información sobre los efectos toxicológicos
- Toxicidad aguda:

· Valores LD/LC50 (dosis letal /dosis letal = 50%) relevantes para la clasificación:

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

( se continua en página 6 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 26.05.2015

Revisión: 26.05.2015

Nombre comercial: ácido acético

( se continua en página 5 )

- **Efecto estimulante primario:**
- **en la piel:** Fuerte efecto cáustico en la piel y las mucosas.
- **en el ojo:** Fuerte efecto cáustico
- **Sensibilización:** No se conoce ningún efecto sensibilizante.
- **Indicaciones toxicológicas adicionales:**  
La ingestión produce un fuerte efecto cáustico en la boca y la faringe, así como el peligro de perforación del esófago y del estómago.


### SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.
- **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.
- **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
Nivel de riesgo para el agua 1 (clasificación de listas): escasamente peligroso para el agua  
En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.  
En estado no diluido o no neutralizado, no verter en el alcantarillado o en otros sistemas de desagüe.
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

### SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.
- **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

### SECCIÓN 14: Información relativa al transporte

- **14.1 Número UN**
- **ADR, IMDG, IATA** UN2789
- **14.2 Designación oficial de transporte de las Naciones Unidas**
- **ADR** 2789 ÁCIDO ACÉTICO GLACIAL
- **IMDG, IATA** ACETIC ACID, GLACIAL
- **14.3 Clase(s) de peligro para el transporte**
- **ADR, IMDG, IATA**
- 
- **Clase** 8 Materias corrosivas

( se continua en página 7 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 26.05.2015

Revisión: 26.05.2015

Nombre comercial: ácido acético

( se continua en página 6 )

· <b>Etiqueta</b>	8+3
· <b>14.4 Grupo de embalaje</b> · <b>ADR, IMDG, IATA</b>	II
· <b>14.5 Peligros para el medio ambiente:</b> · <b>Contaminante marino:</b>	No
· <b>14.6 Precauciones particulares para los usuarios</b> · <b>Número Kemler:</b> · <b>Número EMS:</b> · <b>Segregation groups</b>	Atención: Materias corrosivas 83 F-E,S-C Acids
· <b>14.7 Transporte a granel con arreglo al anexo II del Convenio Marpol 73/78 y del Código IBC</b>	No aplicable.
· <b>Transporte/datos adicionales:</b>	
· <b>ADR</b> · <b>Cantidades limitadas (LQ)</b> · <b>Cantidades exceptuadas (EQ)</b>	1L Código: E2 Cantidad neta máxima por envase interior: 30 ml Cantidad neta máxima por embalaje exterior: 500 ml
· <b>Categoría de transporte</b> · <b>Código de restricción del túnel</b>	2 D/E
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>"Reglamentación Modelo" de la UNECE:</b>	UN2789, ÁCIDO ACÉTICO GLACIAL, 8 (3), II

### SECCIÓN 15: Información reglamentaria

- **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**  
No existen más datos relevantes disponibles.
- **15.2 Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

### SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

#### · Abreviaturas y acrónimos:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A