

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/17/2015

Reviewed on 10/17/2015

## 1 Identification

- **Product identifier**
- **Trade name:** MAY-GRUNWALD STAINING SOLUTION
- **Article number:** 26250-01
- **CAS Number:**  
67-56-1
- **EC number:**  
200-659-6
- **Index number:**  
603-001-00-X
- **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. 2 H225 Highly flammable liquid and vapor.

.....



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.

.....



GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

.....



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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Eye Irrit. 2B H320 Causes eye irritation.

· **Label elements**

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02   GHS06   GHS07   GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Methyl Alcohol

· **Hazard statements**

Highly flammable liquid and vapor.

Toxic if swallowed, in contact with skin or if inhaled.

Causes skin and eye irritation.

Causes damage to organs.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves / eye protection / face protection.

Wear protective gloves.

Wear protective gloves / protective clothing.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

If swallowed: Immediately call a poison center/doctor.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Call a poison center/doctor.

Specific measures (see on this label).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a poison center/doctor if you feel unwell.

Wash contaminated clothing before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Rinse mouth.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 4

Fire = 3

Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	*4	Health = *4
FIRE	3	Fire = 3
REACTIVITY	0	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**  
67-56-1 Methyl Alcohol
- **Identification number(s)**
- **EC number:** 200-659-6
- **Index number:** 603-001-00-X

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Remove breathing apparatus only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
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. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for 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:** Mouth respiratory protective device.

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Trade name: MAY-GRUNWALD STAINING SOLUTION

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## 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).  
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

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **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**

<b>Components with limit values that require monitoring at the workplace:</b>	
<b>67-56-1 Methyl Alcohol</b>	
PEL	Long-term value: 260 mg/m <sup>3</sup> , 200 ppm

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REL	Short-term value: 325 mg/m <sup>3</sup> , 250 ppm Long-term value: 260 mg/m <sup>3</sup> , 200 ppm Skin
TLV	Short-term value: 328 mg/m <sup>3</sup> , 250 ppm Long-term value: 262 mg/m <sup>3</sup> , 200 ppm Skin; BEI

**· Ingredients with biological limit values:**

**67-56-1 Methyl Alcohol**

BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
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**· 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.
- Store protective clothing separately.
- Avoid contact with the eyes.
- 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

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## 9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Blue
Odor:	Pungent
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	-98 °C (-144 °F)
Boiling point/Boiling range:	64.7 °C (148 °F)

- **Flash point:** 11 °C (52 °F)

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

- **Ignition temperature:** 455 °C (851 °F)

- **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:	5.5 Vol %
Upper:	44 Vol %

- **Vapor pressure at 20 °C (68 °F):** 128 hPa (96 mm Hg)

- **Density at 20 °C (68 °F):** 0.79 g/cm<sup>3</sup> (6.593 lbs/gal)

- **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:** Not determined.

- **Kinematic:** Not determined.

- **Organic solvents:** 100.0 %

- **VOC content:** 100.0 %

1000.0 g/l / 8.35 lb/gl

- **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.

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- **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 that are relevant for classification:**

### 67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **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.
- **Behavior in environmental systems:**
- **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.
- **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.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

· **UN-Number**  
 · **DOT, ADR, IMDG, IATA** UN1230

· **UN proper shipping name**  
 · **DOT** Methanol  
 · **ADR** 1230 Methanol  
 · **IMDG, IATA** METHANOL

· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids  
 · **Label** 3, 6.1

· **ADR**



· **Class** 3 Flammable liquids  
 · **Label** 3+6.1

· **IMDG**



· **Class** 3 Flammable liquids  
 · **Label** 3/6.1

· **IATA**



· **Class** 3 Flammable liquids  
 · **Label** 3 (6.1)

· **Packing group**  
 · **DOT, ADR, IMDG, IATA** II

· **Environmental hazards:**  
 · **Marine pollutant:** No

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· <b>Special precautions for user</b>	Warning: Flammable liquids
· <b>Danger code (Kemler):</b>	336
· <b>EMS Number:</b>	F-E,S-D
· <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: 60 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
· <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>	UN1230, Methanol, 3 (6.1), 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 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 listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Substance is not listed.

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· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

GHS06

GHS07

GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Methyl Alcohol*

· **Hazard statements**

*Highly flammable liquid and vapor.*

*Toxic if swallowed, in contact with skin or if inhaled.*

*Causes skin and eye irritation.*

*Causes damage to organs.*

· **Precautionary statements**

*Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*

*Use explosion-proof electrical/ventilating/lighting/equipment.*

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*Wear protective gloves / eye protection / face protection.*

*Wear protective gloves.*

*Wear protective gloves / protective clothing.*

*Ground/bond container and receiving equipment.*

*Use only non-sparking tools.*

*Take precautionary measures against static discharge.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Use only outdoors or in a well-ventilated area.*

*If swallowed: Immediately call a poison center/doctor.*

*IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*Call a poison center/doctor.*

*Specific measures (see on this label).*

*IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*

*Call a poison center/doctor if you feel unwell.*

*Wash contaminated clothing before reuse.*

*If skin irritation occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Rinse mouth.*

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

*Store locked up.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Store in a well-ventilated place. Keep cool.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

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

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## 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** 10/17/2015 / -

· **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

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

US

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

Printing date 17.10.2015

Revision: 17.10.2015

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

· **Product identifier**

· **Trade name:** MAY-GRUNWALD STAINING SOLUTION

· **Article number:** 26250-01

· **CAS Number:**

67-56-1

· **EC number:**

200-659-6

· **Index number:**

603-001-00-X

· **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**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.

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

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Trade name: **MAY-GRUNWALD STAINING SOLUTION**

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GHS08 health hazard

STOT SE 1 H370 Causes damage to organs.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

· **Label elements**· **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**

GHS02



GHS06



GHS07



GHS08

· **Signal word** *Danger*· **Hazard-determining components of labelling:***Methyl Alcohol*· **Hazard statements***Highly flammable liquid and vapour.**Toxic if swallowed, in contact with skin or if inhaled.**Causes skin irritation.**Causes serious eye irritation.**Causes damage to organs.*· **Precautionary statements***Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.**Use explosion-proof electrical/ventilating/lighting/equipment.**Do not breathe dust/fume/gas/mist/vapours/spray.**Wear protective gloves / eye protection / face protection.**Wear protective gloves.**Wear protective gloves / protective clothing.**Ground/bond container and receiving equipment.**Use only non-sparking tools.**Take precautionary measures against static discharge.**Wash thoroughly after handling.**Do not eat, drink or smoke when using this product.**Use only outdoors or in a well-ventilated area.**IF SWALLOWED: Immediately call a POISON CENTER/ doctor.**IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.**Call a POISON CENTER/doctor.**Specific measures (see on this label).**IF INHALED: Remove person to fresh air and keep comfortable for breathing.**Call a POISON CENTER/doctor if you feel unwell.**Wash contaminated clothing before reuse.**If skin irritation occurs: Get medical advice/attention.**If eye irritation persists: Get medical advice/attention.*

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Rinse mouth.

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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**  
67-56-1 Methyl Alcohol
- **Identification number(s)**
- **EC number:** 200-659-6
- **Index number:** 603-001-00-X

### 4 First aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Remove breathing equipment only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
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. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Information for 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 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:** Mouth respiratory protective device.

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

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Trade name: MAY-GRUNWALD STAINING SOLUTION

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## 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).  
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

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **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:**

**67-56-1 Methyl Alcohol**

NES	Short-term value: 328 mg/m <sup>3</sup> , 250 ppm
	Long-term value: 262 mg/m <sup>3</sup> , 200 ppm
Sk	

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

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-AU-

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- **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.

Store protective clothing separately.

Avoid contact with the eyes.

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

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:** Liquid

**Colour:** Blue

- **Odour:** Pungent

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

**Melting point/Melting range:** -98 °C

**Boiling point/Boiling range:** 64.7 °C

- **Flash point:** 11 °C

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

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· <b>Ignition temperature:</b>	455 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Not determined.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	5.5 Vol %
<b>Upper:</b>	44 Vol %
· <b>Vapour pressure at 20 °C:</b>	128 hPa
· <b>Density at 20 °C:</b>	0.79 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:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	100.0 %
<b>VOC (EC)</b>	100.00 %
· <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:**

### 67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** Irritating effect.

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· **Respiratory or skin sensitisation** No sensitising effects known.


## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **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.
- **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>                  |   |
| · <b>ADG, IMDG, IATA</b>            | UN1230  |
| · <b>UN proper shipping name</b>    |   |
| · <b>ADG</b>                        | 1230 METHANOL   |
| · <b>IMDG, IATA</b>                 | METHANOL  |
| · <b>Transport hazard class(es)</b> |   |
| · <b>ADG</b>                        |   |
|                                     |  |
| · <b>Class</b>                      | 3 Flammable liquids.  |
| · <b>Label</b>                      | 3+6.1   |

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**· IMDG**

· **Class** 3 Flammable liquids.  
· **Label** 3/6.1

**· IATA**

· **Class** 3 Flammable liquids.  
· **Label** 3 (6.1)

**· Packing group**

· **ADG, IMDG, IATA** II

**· Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user** Warning: Flammable liquids.

· **Danger code (Kemler):** 336

· **EMS Number:** F-E,S-D

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

**· 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**

· **Tunnel restriction code** 2  
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":** UN1230, METHANOL, 3 (6.1), II

### 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**

67-56-1 Methyl Alcohol

S5, S6

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· **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS02

GHS06

GHS07

GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*Methyl Alcohol*

· **Hazard statements**

*Highly flammable liquid and vapour.*

*Toxic if swallowed, in contact with skin or if inhaled.*

*Causes skin irritation.*

*Causes serious eye irritation.*

*Causes damage to organs.*

· **Precautionary statements**

*Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*

*Use explosion-proof electrical/ventilating/lighting/equipment.*

*Do not breathe dust/fume/gas/mist/vapours/spray.*

*Wear protective gloves / eye protection / face protection.*

*Wear protective gloves.*

*Wear protective gloves / protective clothing.*

*Ground/bond container and receiving equipment.*

*Use only non-sparking tools.*

*Take precautionary measures against static discharge.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Use only outdoors or in a well-ventilated area.*

*IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*

*IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*Call a POISON CENTER/doctor.*

*Specific measures (see on this label).*

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

*Call a POISON CENTER/doctor if you feel unwell.*

*Wash contaminated clothing before reuse.*

*If skin irritation occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Rinse mouth.*

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

*Store locked up.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Store in a well-ventilated place. Keep cool.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** Substance is not listed.

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

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**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*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

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

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*Flam. Liq. 2: Flammable liquids, Hazard Category 2*

*Acute Tox. 3: Acute toxicity, Hazard Category 3*

*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*

*Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2*

*STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1*

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acc. to OSHA HCS

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Reviewed on 10/17/2015

## 1 Identification

- **Product identifier**
- **Trade name:** MAY-GRUNWALD STAINING SOLUTION
- **Article number:** 26250-01
- **CAS Number:**  
67-56-1
- **EC number:**  
200-659-6
- **Index number:**  
603-001-00-X
- **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. 2 H225 Highly flammable liquid and vapor.

.....



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.

.....



GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

.....



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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*Eye Irrit. 2B H320 Causes eye irritation.*

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

Not applicable.



**Very toxic**

*Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed.*



**Toxic**

*Toxic by inhalation, in contact with skin and if swallowed.*



**Irritant**

*Irritating to eyes.*



**Highly flammable**

*Highly 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.*

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



**Very toxic**

**Highly flammable**

· **Risk phrases:**

*Highly flammable.*

*Toxic by inhalation, in contact with skin and if swallowed.*

*Irritating to eyes.*

*Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed.*

· **Safety phrases:**

*After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.*

*Wear suitable protective clothing, gloves and eye/face protection.*

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

*This material and its container must be disposed of as hazardous waste.*

· **Hazard description:**

· **WHMIS-symbols:**

*B2 - Flammable liquid*

*D1A - Very toxic material causing immediate and serious toxic effects*

*D2A - Very toxic material causing other toxic effects*



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· **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**

67-56-1 Methyl Alcohol

· **Identification number(s)**

· **EC number:** 200-659-6

· **Index number:** 603-001-00-X

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

Supply fresh air or oxygen; call for doctor.

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. If symptoms persist, consult a doctor.

· **After swallowing:** Do not induce vomiting; immediately call for medical help.

· **Information for 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.

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- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 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).  
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

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **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.

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· **Control parameters**

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

**67-56-1 Methyl Alcohol**

EL	Short-term value: 250 ppm Long-term value: 200 ppm Skin
EV	Short-term value: 325 mg/m <sup>3</sup> , 250 ppm Long-term value: 260 mg/m <sup>3</sup> , 200 ppm Skin

· **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.
- Store protective clothing separately.
- Avoid contact with the eyes.
- 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:** Liquid

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<b>Color:</b>	Blue
<b>· Odor:</b>	Pungent
<b>· Odour threshold:</b>	Not determined.
<b>· pH-value:</b>	Not determined.
<b>· Change in condition</b>	
<b>Melting point/Melting range:</b>	-98 °C
<b>Boiling point/Boiling range:</b>	64.7 °C
<b>· Flash point:</b>	11 °C
<b>· Flammability (solid, gaseous):</b>	Not flammable.
<b>· Ignition temperature:</b>	455 °C
<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>	5.5 Vol %
<b>Upper:</b>	44 Vol %
<b>· Vapor pressure at 20 °C:</b>	128 hPa
<b>· Density at 20 °C:</b>	0.79 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</b>	
<b>Water:</b>	Fully miscible.
<b>· Partition coefficient (n-octanol/water):</b>	Not determined.
<b>· Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Organic solvents:</b>	100.0 %
<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.

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## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

### 67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

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

- **Additional toxicological information:**

- **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.

- **Behavior in environmental systems:**

- **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.

- **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.

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

## 14 Transport information

· **UN-Number**

· **DOT, TDG, IMDG, IATA** UN1230

· **UN proper shipping name**

· **DOT** Methanol  
 · **TDG** 1230 Methanol  
 · **IMDG, IATA** METHANOL

· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids  
 · **Label** 3, 6.1

· **TDG (Transport dangerous goods):**



· **Class** 3 Flammable liquids  
 · **Label** 3+6.1

· **IMDG**



· **Class** 3 Flammable liquids  
 · **Label** 3/6.1

· **IATA**



· **Class** 3 Flammable liquids  
 · **Label** 3 (6.1)

· **Packing group**

· **DOT, TDG, IMDG, IATA** II

· **Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):** 336

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· <b>EMS Number:</b>	F-E,S-D
· <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: 60 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
· <b>UN "Model Regulation":</b>	UN1230, Methanol, 3 (6.1), 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 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 listed.

#### · Carcinogenic categories

#### · EPA (Environmental Protection Agency)

Substance is not listed.

#### · TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

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# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/17/2015

Reviewed on 10/17/2015

**Trade name: MAY-GRUNWALD STAINING SOLUTION**

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· **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:**



Very toxic  
Highly flammable

· **Risk phrases:**

Highly flammable.

Toxic by inhalation, in contact with skin and if swallowed.

Irritating to eyes.

Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed.

· **Safety phrases:**

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Wear suitable protective clothing, gloves and eyeface protection.

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

This material and its container must be disposed of as hazardous waste.

· **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** 10/17/2015 / -

· **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

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. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

STOT-SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

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

Printing date 17.10.2015

Revision: 17.10.2015

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

- **1.1 Product identifier**
- **Trade name:** MAY-GRUNWALD STAINING SOLUTION
- **Article number:** 26250-01
- **CAS Number:**  
67-56-1
- **EC number:**  
200-659-6
- **Index number:**  
603-001-00-X
- **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. 2 H225 Highly flammable liquid and vapour.



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 health hazard

STOT SE 1 H370 Causes damage to organs.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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# Safety data sheet

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

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**Trade name: MAY-GRUNWALD STAINING SOLUTION**

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- **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    GHS06    GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
*Methyl Alcohol*
- **Hazard statements**
  - H225                      *Highly flammable liquid and vapour.*
  - H301+H311+H331 *Toxic if swallowed, in contact with skin or if inhaled.*
  - H315                      *Causes skin irritation.*
  - H370                      *Causes damage to organs.*
- **Precautionary statements**
  - P210                      *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
  - P241                      *Use explosion-proof electrical/ventilating/lighting/equipment.*
  - P301+P310              *IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*
  - P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*
  - 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**  
*67-56-1 Methyl Alcohol*
- **Identification number(s)**
- **EC number:** *200-659-6*
- **Index number:** *603-001-00-X*

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**  
*Immediately remove any clothing soiled by the product.*  
*Remove breathing equipment only after contaminated clothing have been completely removed.*  
*In case of irregular breathing or respiratory arrest provide artificial respiration.*
- **After inhalation:**  
*Supply fresh air or oxygen; call for doctor.*

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- 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. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help 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:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **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).  
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.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.

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Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· **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:**

#### 67-56-1 Methyl Alcohol

WEL	Short-term value: 333 mg/m <sup>3</sup> , 250 ppm
	Long-term value: 266 mg/m <sup>3</sup> , 200 ppm
	Sk

· **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.

Store protective clothing separately.

Avoid contact with the eyes.

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

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

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Trade name: MAY-GRUNWALD STAINING SOLUTION

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### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

Form: Liquid

Colour: Blue

· Odour: Pungent

· Odour threshold: Not determined.

· pH-value: Not determined.

##### · Change in condition

Melting point/Melting range: -98 °C

Boiling point/Boiling range: 64.7 °C

· Flash point: 11 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 455 °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: 5.5 Vol %

Upper: 44 Vol %

· Vapour pressure at 20 °C: 128 hPa

· Density at 20 °C: 0.79 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: Not determined.

Kinematic: Not determined.

##### · Solvent content:

Organic solvents: 100.0 %

VOC (EC) 100.00 %

· 9.2 Other information: 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.

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- **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:**

#### 67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

### 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **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** UN1230

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Trade name: **MAY-GRUNWALD STAINING SOLUTION**

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· **14.2 UN proper shipping name**  
· **ADR** 1230 METHANOL  
· **IMDG, IATA** METHANOL

· **14.3 Transport hazard class(es)**· **ADR**

· **Class** 3 Flammable liquids.  
· **Label** 3+6.1

· **IMDG**

· **Class** 3 Flammable liquids.  
· **Label** 3/6.1

· **IATA**

· **Class** 3 Flammable liquids.  
· **Label** 3 (6.1)

· **14.4 Packing group**· **ADR, IMDG, IATA** II· **14.5 Environmental hazards:**· **Marine pollutant:** No· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Danger code (Kemler):**

336

· **EMS Number:**

F-E,S-D

· **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

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

1L

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Revision: 17.10.2015

**Trade name: MAY-GRUNWALD STAINING SOLUTION**

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· <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>	UN1230, METHANOL, 3 (6.1), II

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I Substance is not listed.**
- **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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

# Veiligheidsinformatieblad volgens 1907/2006/EG, Artikel 31

datum van de druk: 17.10.2015

Herziening van: 17.10.2015

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

### · 1.1 Productidentificatie

· **Handelsnaam:** MAY-GRUNWALD STAINING SOLUTION

· **Artikelnummer:** 26250-01

· **CAS-nummer:**

67-56-1

· **EC-nummer:**

200-659-6

· **Catalogusnummer:**

603-001-00-X

· **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. 2 H225 Licht ontvlambare vloeistof en damp.



GHS06 doodshoofd met gekruiste beenderen

Acute Tox. 3 H301 Giftig bij inslikken.

Acute Tox. 3 H311 Giftig bij contact met de huid.

Acute Tox. 3 H331 Giftig bij inademing.

(Vervolg op blz. 2)



# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 17.10.2015

Herziening van: 17.10.2015

**Handelsnaam: MAY-GRUNWALD STAINING SOLUTION**

(Vervolg van blz. 1)



GHS08 gezondheidsgevaar

STOT SE 1 H370 Veroorzaakt schade aan organen.



GHS07

Skin Irrit. 2 H315 Veroorzaakt huidirritatie.

### · 2.2 Etiketteringselementen

#### · Etikettering overeenkomstig Verordening (EG) nr. 1272/2008

De stof/product is geïdentificeerd en geëtiketteerd volgens de CLP-verordening.

#### · Gevarenpictogrammen



GHS02



GHS06



GHS08

#### · Signaalwoord Gevaar

#### · Gevaaraanduidende componenten voor de etikettering:

methanol

#### · Gevarenaanduidingen

H225

Licht ontvlambare vloeistof en damp.

H301+H311+H331 Giftig bij inslikken, bij contact met de huid en bij inademing.

H315

Veroorzaakt huidirritatie.

H370

Veroorzaakt schade aan organen.

#### · Veiligheidsaanbevelingen

P210

Verwijderd houden van warmte, hete oppervlakken, vonken, open vuur en andere ontstekingsbronnen. Niet roken.

P241

Explosieveilige elektrische-/ventilatie-/verlichtings- apparatuur gebruiken.

P301+P310

NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.

P303+P361+P353

BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken.

Huid met water afspoelen/afdouchen.

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

67-56-1 methanol

#### · Identificatienummer(s)

· **EC-nummer:** 200-659-6

(Vervolg op blz. 3)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 17.10.2015

Herziening van: 17.10.2015

**Handelsnaam: MAY-GRUNWALD STAINING SOLUTION**

(Vervolg van blz. 2)

· **Catalogusnummer: 603-001-00-X**

### RUBRIEK 4: Eerstehulpmaatregelen

- **4.1 Beschrijving van de eerstehulpmaatregelen**
- **Algemene informatie:**
  - Verontreinigde kleding onmiddellijk uittrekken.
  - Ademhalingstoestel pas afnemen nadat de verontreinigde kleding verwijderd is.
  - Bij onregelmatige ademhaling of ademstilstand kunstmatige ademhaling toepassen.
- **Na het inademen:**
  - Verse lucht of zuurstof toedienen; deskundige medische hulp invoeren.
  - Bij bewusteloosheid ligging en vervoer in stabiele zijligging.
- **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.
- **Na oogcontact:**
  - De ogen gedurende verscheidene minuten onder stromend water afspoelen terwijl de oogspleet geopend blijft. Bij aanhoudende klachten een dokter raadplegen.
- **Na inslikken:** Geen braken teweegbrengen en onmiddellijk medische hulp raadplegen.
- **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.

### 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 brandweelieden**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

### 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.
  - 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.

(Vervolg op blz. 4)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 17.10.2015

Herziening van: 17.10.2015

**Handelsnaam: MAY-GRUNWALD STAINING SOLUTION**

(Vervolg van blz. 3)

### 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.  
 Tanks voorzichtig openen en behandelen.  
 Aërosolvorming vermijden.
- **Informatie m.b.t. brand- en ontploffingsgevaar:**  
 Onststekingsbronnen op afstand houden - niet roken.  
 Beschermen tegen hitte.  
 Maatregelen treffen tegen ontlading van statische elektriciteit.  
 Ademhalingsstoestellen gereedhouden.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Op een koele plaats bewaren.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:**  
 Tanks ondoordringbaar gesloten houden.  
 Koel en droog bewaren in goed gesloten vaten.  
 Tegen hitte en directe zonnestralen beschermen.
- **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:**

**67-56-1 methanol**

WGW | Lange termijn waarde: 133 mg/m<sup>3</sup>, 100 ppm

- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **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.  
 Beschermende kleding afzonderlijk bewaren.  
 Aanraking met de ogen vermijden.  
 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 chemicaliënmengsel afgegeven worden.  
 Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

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· **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:**

· <b>Vorm:</b>	Vloeistof
· <b>Kleur:</b>	Blauw
· <b>Reuk:</b>	Stekend
· <b>Geurdrempelwaarde:</b>	Niet bepaald.

· **pH-waarde:** Niet bepaald.

· **Toestandsverandering**

· <b>Smeltpunt/smeltbereik:</b>	-98 °C
· <b>Kookpunt/kookpuntbereik:</b>	64,7 °C

· **Vlampunt:** 11 °C

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

· **Ontstekingstemperatuur:** 455 °C

· **Ontbindingstemperatuur:** Niet bepaald.

· **Zelfonsteking:** Niet bepaald.

· **Ontploffingsgevaar:** Het produkt is niet ontploffingsgevaarlijk, maar de vorming van ontploffingsgevaarlijke damp-/luchtmengsels is mogelijk.

· **Ontploffingsgrenzen:**

· <b>Onderste:</b>	5,5 Vol %
· <b>Bovenste:</b>	44 Vol %

· **Dampspanning bij 20 °C:** 128 hPa

· <b>Dichtheid bij 20 °C:</b>	0,79 g/cm <sup>3</sup>
· <b>Relatieve dichtheid</b>	Niet bepaald.
· <b>Dampdichtheid</b>	Niet bepaald.
· <b>Verdampingssnelheid</b>	Niet bepaald.

· **Oplosbaarheid in/mengbaarheid met**

· **Water:** Volledig mengbaar.

· **Verdelingscoëfficiënt (n-octanol/water):** Niet bepaald.

· **Viscositeit**

· **Dynamisch:** Niet bepaald.

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<b>Kinematisch:</b>	Niet bepaald.
<b>Oplosmiddelgehalte:</b>	
Organisch oplosmiddel:	100,0 %
VOC (EG)	100,00 %
<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**

<b>Indelingsrelevantie LD/LC50-waarden:</b>		
<b>67-56-1 methanol</b>		
Oraal	LD50	5628 mg/kg (rat)
Dermaal	LD50	15800 mg/kg (rabbit)

- **Primaire aandoening:**
- **Huidcorrosie/-irritatie** Geen prikkelend effect.
- **Ernstig oogletsel/oogirritatie** Prikkeling
- **Sensibilisatie van de luchtwegen/de huid** Geen effect van overgevoeligheid bekend.

### 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.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

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## 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

- |   |  |
|---|--|
| · <b>14.1 VN-nummer</b><br>· <b>ADR, IMDG, IATA</b>   | UNI230   |
| · <b>14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN</b><br>· <b>ADR</b><br>· <b>IMDG, IATA</b> | 1230 METHANOL<br>METHANOL                              |
| · <b>14.3 Transportgevarenklasse(n)</b><br>· <b>ADR</b>   |  |
|                                   |  |
| · <b>klasse</b><br>· <b>Etiket</b>  | 3 Brandbare vloeistoffen<br>3+6.1                      |
| · <b>IMDG</b>   |  |
|                                  |  |
| · <b>Class</b><br>· <b>Label</b>  | 3 Brandbare vloeistoffen<br>3/6.1                      |
| · <b>IATA</b>   |  |
|                                  |  |
| · <b>Class</b><br>· <b>Label</b>  | 3 Brandbare vloeistoffen<br>3 (6.1)                    |
| · <b>14.4 Verpakkingsgroep:</b><br>· <b>ADR, IMDG, IATA</b>   | II   |
| · <b>14.5 Milieugevaren:</b><br>· <b>Marine pollutant:</b>  | Neen   |
| · <b>14.6 Bijzondere voorzorgen voor de gebruiker</b><br>· <b>Kemler-getal:</b><br>· <b>EMS-nummer:</b>             | Waarschuwing: Brandbare vloeistoffen<br>336<br>F-E,S-D |

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- |   |   |
|---|---|
| · <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<br>Grootste netto hoeveelheid per binnenverpakking: 30 ml<br>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<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml               |
| · <b>VN "Model Regulation":</b>   | UN1230, METHANOL, 3 (6.1), 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**

67-56-1 methanol

2

- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

De stof is niet aanwezig.

- **Richtlijn 2012/18/EU**

- **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** 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

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*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*VOC: Volatile Organic Compounds (USA, EU)*  
*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*Flam. Liq. 2: Flammable liquids, Hazard Category 2*  
*Acute Tox. 3: Acute toxicity, Hazard Category 3*  
*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*  
*STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1*

-NL-



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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

· **1.1 Identificateur de produit**

· **Nom du produit:** MAY-GRUNWALD STAINING SOLUTION

· **Code du produit:** 26250-01

· **No CAS:**

67-56-1

· **Numéro CE:**

200-659-6

· **Numéro index:**

603-001-00-X

· **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. 2 H225 Liquide et vapeurs très inflammables.



GHS06 tête de mort sur deux tibias

Acute Tox. 3 H301 Toxique en cas d'ingestion.

Acute Tox. 3 H311 Toxique par contact cutané.

Acute Tox. 3 H331 Toxique par inhalation.



GHS08 danger pour la santé

STOT SE 1 H370 Risque avéré d'effets graves pour les organes.



GHS07

Skin Irrit. 2 H315 Provoque une irritation cutanée.

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- **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    GHS06    GHS08

- **Mention d'avertissement** Danger
- **Composants dangereux déterminants pour l'étiquetage:**  
méthanol
- **Mentions de danger**
  - H225                    Liquide et vapeurs très inflammables.
  - H301+H311+H331    Toxique par ingestion, par contact cutané ou par inhalation.
  - H315                    Provoque une irritation cutanée.
  - H370                    Risque avéré d'effets graves pour les organes.
- **Conseils de prudence**
  - P210                    Tenir à l'écart de la chaleur, des surfaces chaudes, des étincelles, des flammes nues et de toute autre source d'inflammation. Ne pas fumer.
  - P241                    Utiliser du matériel électrique/de ventilation/d'éclairage/antidéflagrant.
  - P301+P310            EN CAS D'INGESTION: Appeler immédiatement un CENTRE ANTIPOISON/un médecin.
  - P303+P361+P353    EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Enlever immédiatement tous les vêtements contaminés. Rincer la peau à l'eau/Se doucher.
  - 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**  
67-56-1 méthanol
- **Code(s) d'identification**
- **Numéro CE:** 200-659-6
- **Numéro index:** 603-001-00-X

### SECTION 4: Premiers secours

- **4.1 Description des premiers secours**
- **Remarques générales:**  
Enlever immédiatement les vêtements contaminés par le produit.  
Ne retirer la protection respiratoire qu'après avoir retiré les vêtements contaminés.  
Respiration artificielle dans le cas d'une respiration irrégulière ou d'un arrêt respiratoire.
- **Après inhalation:**  
Donner de l'air frais ou de l'oxygène; demander d'urgence une assistance médicale.  
En cas d'inconscience, coucher et transporter la personne en position latérale stable.

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- **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. Si les troubles persistent, consulter un médecin.
- **Après ingestion:** Ne pas faire vomir, demander d'urgence une assistance médicale.
- **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:** Porter un appareil de protection respiratoire.

### 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).  
Évacuer 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.  
Ouvrir et manipuler les récipients avec précaution.  
Éviter la formation d'aérosols.
- **Préventions des incendies et des explosions:**  
Tenir à l'abri des sources d'inflammation - ne pas fumer.  
Tenir à l'abri de la chaleur.  
Prendre des mesures contre les charges électrostatiques.  
Tenir des appareils de protection respiratoire prêts.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Stocker dans un endroit frais.

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- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:**  
Tenir les emballages hermétiquement fermés.  
Stocker au frais et au sec dans des fûts bien fermés.  
Protéger de la forte chaleur et du rayonnement direct du soleil.
- **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:**

#### 67-56-1 méthanol

VME	Valeur momentanée: 1300 mg/m <sup>3</sup> , 1000 ppm Valeur à long terme: 260 mg/m <sup>3</sup> , 200 ppm risque de pénétration percutanée, (11)
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- **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.

Conserver à part les vêtements de protection.

Eviter tout contact avec les yeux.

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.

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· **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>	Bleu
<b>Odeur:</b>	Piquante
<b>Seuil olfactif:</b>	Non déterminé.

· **valeur du pH:** Non déterminé.

· **Changement d'état**

<b>Point de fusion:</b>	-98 °C
<b>Point d'ébullition:</b>	64,7 °C

· **Point d'éclair** 11 °C

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

· **Température d'inflammation:** 455 °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:**

<b>Inférieure:</b>	5,5 Vol %
<b>Supérieure:</b>	44 Vol %

· **Pression de vapeur à 20 °C:** 128 hPa

· **Densité à 20 °C:** 0,79 g/cm<sup>3</sup>

· **Densité relative** Non déterminé.

· **Densité de vapeur.** Non déterminé.

· **Vitesse d'évaporation** Non déterminé.

· **Solubilité dans/miscibilité avec l'eau:**

Entièrement miscible

· **Coefficient de partage (n-octanol/eau):** Non déterminé.

· **Viscosité:**

<b>Dynamique:</b>	Non déterminé.
<b>Cinématique:</b>	Non déterminé.

· **Teneur en solvants:**

<b>Solvants organiques:</b>	100,0 %
<b>VOC (CE)</b>	100,00 %

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· **9.2 Autres informations** 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:**

#### 67-56-1 méthanol

Oral	LD50	5628 mg/kg (rat)
Dermique	LD50	15800 mg/kg (lapin)

- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée** Pas d'effet d'irritation.
- **Lésions oculaires graves/irritation oculaire** Effet d'irritation.
- **Sensibilisation respiratoire ou cutanée** Aucun effet de sensibilisation connu.

### 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.
- **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.
- **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.

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- **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

· 14.1 No ONU

· ADR, IMDG, IATA

UN1230

· 14.2 Nom d'expédition des Nations unies

· ADR

1230 MÉTHANOL

· IMDG, IATA

METHANOL

· 14.3 Classe(s) de danger pour le transport

· ADR



· Classe

3 Liquides inflammables.

· Étiquette

3+6.1

· IMDG



· Class

3 Liquides inflammables.

· Label

3/6.1

· IATA



· Class

3 Liquides inflammables.

· Label

3 (6.1)

· 14.4 Groupe d'emballage

· ADR, IMDG, IATA

II

· 14.5 Dangers pour l'environnement:

· Marine Pollutant:

Non

· 14.6 Précautions particulières à prendre par l'utilisateur

Attention: Liquides inflammables.

· Indice Kemler:

336

· No EMS:

F-E,S-D

· 14.7 Transport en vrac conformément à l'annexe II de la convention Marpol 73/78 et au recueil IBC

Non applicable.

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**· 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:

UN1230, MÉTHANOL, 3 (6.1), 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
- Directive 2012/18/UE
- Substances dangereuses désignées - ANNEXE I la substance n'est pas comprise
- 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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1



# Sicherheitsdatenblatt

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

- **1.1 Produktidentifikator**
- **Handelsname:** MAY-GRUNWALD STAINING SOLUTION
- **Artikelnummer:** 26250-01
- **CAS-Nummer:**  
67-56-1
- **EG-Nummer:**  
200-659-6
- **Indexnummer:**  
603-001-00-X
- **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. 2 H225 Flüssigkeit und Dampf leicht entzündbar.



GHS06 Totenkopf mit gekreuzten Knochen

Acute Tox. 3 H301 Giftig bei Verschlucken.

Acute Tox. 3 H311 Giftig bei Hautkontakt.

Acute Tox. 3 H331 Giftig bei Einatmen.

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GHS08 Gesundheitsgefahr

STOT SE 1 H370 Schädigt die Organe.



GHS07

Skin Irrit. 2 H315 Verursacht Hautreizungen.

- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**  
Der Stoff ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.
- **Gefahrenpiktogramme**



GHS02



GHS06



GHS08

- **Signalwort Gefahr**
- **Gefahrbestimmende Komponenten zur Etikettierung:**  
Methanol
- **Gefahrenhinweise**
  - H225 Flüssigkeit und Dampf leicht entzündbar.
  - H301+H311+H331 Giftig bei Verschlucken, Hautkontakt oder Einatmen.
  - H315 Verursacht Hautreizungen.
  - H370 Schädigt die Organe.
- **Sicherheitshinweise**
  - P210 Von Hitze, heißen Oberflächen, Funken, offenen Flammen und anderen Zündquellen fernhalten. Nicht rauchen.
  - P241 Explosionsgeschützte elektrische Geräte/Lüftungsanlagen/Beleuchtungsanlagen verwenden.
  - P301+P310 BEI VERSCHLUCKEN: Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.
  - P303+P361+P353 BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen/duschen.
  - 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**  
67-56-1 Methanol
- **Identifikationsnummer(n)**
- **EG-Nummer:** 200-659-6

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### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

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

· **Allgemeine Hinweise:**

Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.  
 Atemschutz erst nach Entfernen verunreinigter Kleidungsstücke abnehmen.  
 Bei unregelmäßiger Atmung oder Atemstillstand künstliche Beatmung.

· **Nach Einatmen:**

Frischlucht- oder Sauerstoffzufuhr; ärztliche Hilfe in Anspruch nehmen.  
 Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.

· **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.

· **Nach Augenkontakt:**

Augen mehrere Minuten bei geöffnetem Lidspalt unter fließendem Wasser spülen. Bei anhaltenden Beschwerden Arzt konsultieren.

· **Nach Verschlucken:** Kein Erbrechen herbeiführen, sofort Arzthilfe zuziehen.

· **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.

### 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:** Atemschutzgerät anlegen.

### 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.

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.

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### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Behälter mit Vorsicht öffnen und handhaben.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:**  
Zündquellen fernhalten - nicht rauchen.  
Vor Hitze schützen.  
Maßnahmen gegen elektrostatische Aufladung treffen.  
Atemschutzgeräte bereithalten.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** An einem kühlen Ort lagern.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:**  
Behälter dicht geschlossen halten.  
In gut verschlossenen Gebinden kühl und trocken lagern.  
Vor Hitze und direkter Sonnenbestrahlung schützen.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** Leichtentzündlich
- **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.
- **8.1 Zu überwachende Parameter**

- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**

#### 67-56-1 Methanol

AGW	Langzeitwert: 270 mg/m <sup>3</sup> , 200 ml/m <sup>3</sup> 4(I);DFG, EU, H, Y
-----	---

- **Bestandteile mit biologischen Grenzwerten:**

#### 67-56-1 Methanol

BGW	30 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: bei Langzeitexposition: Nach mehreren vorangegangenen Schichten, Expositionsende bzw. Schichtende Parameter: Methanol
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- **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.  
Getrennte Aufbewahrung der Schutzkleidung.  
Berührung mit den Augen vermeiden.  
Berührung mit den Augen und der Haut vermeiden.

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**· 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:** Flüssigkeit

**Farbe:** Blau

**· Geruch:** Stechend

**· Geruchsschwelle:** Nicht bestimmt.

**· pH-Wert:** Nicht bestimmt.

**· Zustandsänderung**

**Schmelzpunkt/Schmelzbereich:** -98 °C

**Siedepunkt/Siedebereich:** 64,7 °C

**· Flammpunkt:** 11 °C

**· Entzündlichkeit (fest, gasförmig):** Nicht anwendbar.

**· Zündtemperatur:** 455 °C

**· Zersetzungstemperatur:** Nicht bestimmt.

**· Selbstentzündlichkeit:** Nicht bestimmt.

**· Explosionsgefahr:** Das Produkt ist nicht explosionsgefährlich, jedoch ist die Bildung explosionsgefährlicher Dampf-/Luftgemische möglich.

**· Explosionsgrenzen:**

**Untere:** 5,5 Vol %

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<b>Obere:</b>	44 Vol %
· <b>Dampfdruck bei 20 °C:</b>	128 hPa
· <b>Dichte bei 20 °C:</b>	0,79 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:</b>	Nicht bestimmt.
<b>Kinematisch:</b>	Nicht bestimmt.
· <b>Lösemittelgehalt:</b>	
<b>Organische Lösemittel:</b>	100,0 %
<b>VOC (EU)</b>	100,00 %
· <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**

**Einstufungsrelevante LD/LC50-Werte:**
**67-56-1 Methanol**

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut** Keine Reizwirkung.
- **Schwere Augenschädigung/-reizung** Reizwirkung.
- **Sensibilisierung der Atemwege/Haut** Keine sensibilisierende Wirkung bekannt.

### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.

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- **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.
- **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

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Nummer</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN1230                                 |
| <ul style="list-style-type: none"> <li>· <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>   | 1230 METHANOL<br>METHANOL              |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgefahrenklassen</b></li> <li>· <b>ADR</b></li> </ul>  | 3 Entzündbare flüssige Stoffe<br>3+6.1 |
| <div style="display: flex; align-items: center; gap: 10px;">   </div> | 3 Entzündbare flüssige Stoffe<br>3+6.1 |
| <ul style="list-style-type: none"> <li>· <b>IMDG</b></li> </ul>   | 3 Entzündbare flüssige Stoffe<br>3/6.1 |
| <div style="display: flex; align-items: center; gap: 10px;">   </div> | 3 Entzündbare flüssige Stoffe<br>3/6.1 |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>  | 3 Entzündbare flüssige Stoffe<br>3/6.1 |

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**· IATA**


· **Class** 3 Entzündbare flüssige Stoffe  
 · **Label** 3 (6.1)

· **14.4 Verpackungsgruppe**  
 · **ADR, IMDG, IATA** II

· **14.5 Umweltgefahren:**  
 · **Marine pollutant:** Nein

· **14.6 Besondere Vorsichtsmaßnahmen für den Verwender** Achtung: Entzündbare flüssige Stoffe  
 · **Kemler-Zahl:** 336  
 · **EMS-Nummer:** F-E,S-D

· **14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens 73/78 und gemäß IBC-Code** Nicht anwendbar.

**· Transport/weitere Angaben:**

· **ADR**  
 · **Begrenzte Menge (LQ)** 1L  
 · **Freigestellte Mengen (EQ)** Code: E2  
 Höchste Nettomenge je Innenverpackung: 30 ml  
 Höchste Nettomenge je Außenverpackung: 500 ml  
 · **Beförderungskategorie** 2  
 · **Tunnelbeschränkungscode** 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":** UN1230, METHANOL, 3 (6.1), II

### ABSCHNITT 15: Rechtsvorschriften

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

· **Richtlinie 2012/18/EU**  
 · **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Der Stoff ist nicht enthalten.

· **Nationale Vorschriften:**

· **Technische Anleitung Luft:**

Klasse	Anteil in %
I	100,0

· **Wassergefährdungsklasse: WGK 1 (Listeneinstufung):** schwach wassergefährdend.

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**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.

**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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

DE

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

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** MAY-GRUNWALD STAINING SOLUTION

· **Articolo numero:** 26250-01

· **Numero CAS:**

67-56-1

· **Numeri CE:**

200-659-6

· **Numero indice:**

603-001-00-X

· **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. 2 H225 Liquido e vapori facilmente infiammabili.



GHS06 teschio e tibie incrociate

Acute Tox. 3 H301 Tossico se ingerito.

Acute Tox. 3 H311 Tossico per contatto con la pelle.

Acute Tox. 3 H331 Tossico se inalato.



GHS08 pericolo per la salute

STOT SE 1 H370 Provoca danni agli organi.

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GHS07

*Skin Irrit. 2 H315 Provoca irritazione cutanea.*

**· 2.2 Elementi dell'etichetta**

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

*La sostanza è classificata ed etichettata conformemente al regolamento CLP.*

**· Pittogrammi di pericolo**



GHS02

GHS06

GHS08

**· Avvertenza Pericolo**

**· Componenti pericolosi che ne determinano l'etichettatura:**

*metanolo*

**· Indicazioni di pericolo**

*H225 Liquido e vapori facilmente infiammabili.*

*H301+H311+H331 Tossico se ingerito, a contatto con la pelle o se inalato.*

*H315 Provoca irritazione cutanea.*

*H370 Provoca danni agli organi.*

**· Consigli di prudenza**

*P210 Tenere lontano da fonti di calore, superfici riscaldate, scintille, fiamme e altre fonti di innesco. Vietato fumare.*

*P241 Utilizzare impianti elettrici/di ventilazione/d'illuminazione/a prova di esplosione.*

*P301+P310 IN CASO DI INGESTIONE: contattare immediatamente un CENTRO ANTIVELENI/un medico.*

*P303+P361+P353 IN CASO DI CONTATTO CON LA PELLE (o con i capelli): togliere immediatamente tutti gli indumenti contaminati. Sciacquare la pelle/fare una doccia.*

*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**

*67-56-1 metanolo*

**· Numeroli di identificazione**

**· Numeri CE:** 200-659-6

**· Numero indice:** 603-001-00-X

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#### **SEZIONE 4: Misure di primo soccorso**

· **4.1 Descrizione delle misure di primo soccorso**

· **Indicazioni generali:**

Allontanare immediatamente gli abiti contaminati dal prodotto.

Levarsi la maschera protettiva solamente dopo aver tolto gli abiti contaminati.

In caso di respirazione irregolare o di blocco respiratorio praticare la respirazione artificiale.

· **Inalazione:**

Portare il soggetto in zona ben areata o somministrare ossigeno; chiedere l'intervento di un medico.

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. Se persiste il dolore consultare il medico.

· **Ingestione:** Non provocare il vomito, chiamare subito il 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.

#### **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:** Indossare il respiratore.

#### **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).

Smaltimento del materiale contaminato conformemente al punto 13.

Provvedere ad una sufficiente areazione.

· **6.4 Riferimento ad altre sezioni**

Per informazioni relative ad una 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.

Aprire e manipolare i recipienti con cautela.

Evitare la formazione di aerosol.

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- **Indicazioni in caso di incendio ed esplosione:**  
Tenere lontano da fonti di calore, non fumare.  
Proteggere dal calore.  
Adottare provvedimenti contro cariche elettrostatiche.  
Tener pronto il respiratore.
- **7.2 Condizioni per l'immagazzinamento sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Conservare in ambiente fresco.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:**  
Mantenere i recipienti ermeticamente chiusi.  
Conservare in luogo fresco e asciutto in fusti ben chiusi.  
Proteggere dal calore e dai raggi diretti del sole.
- **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.

**8.1 Parametri di controllo**

- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**

**67-56-1 metanolo**

TWA	Valore a breve termine: 328 mg/m <sup>3</sup> , 250 ppm Valore a lungo termine: 262 mg/m <sup>3</sup> , 200 ppm Cute, IBE
VL	Valore a lungo termine: 260 mg/m <sup>3</sup> , 200 ppm Pelle

- **Componenti con valori limite biologici:**

**67-56-1 metanolo**

IBE	15 mg/l Campioni: urine Momento del prelievo: a fine turno Indicatore biologico: metanolo
-----	--

- **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.  
Custodire separatamente l'equipaggiamento protettivo.  
Evitare il contatto con gli occhi.  
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.

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· **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:** Blu

· **Odore:** Pungente

· **Soglia olfattiva:** Non definito.

· **valori di pH:** Non definito.

· **Cambiamento di stato**

**Temperatura di fusione/ambito di fusione:** -98 °C

**Temperatura di ebollizione/ambito di ebollizione:** 64,7 °C

· **Punto di infiammabilità:** 11 °C

· **Infiammabilità (solido, gassoso):** Non applicabile.

· **Temperatura di accensione:** 455 °C

· **Temperatura di decomposizione:** Non definito.

· **Autoaccensione:** Non definito.

· **Pericolo di esplosione:** Prodotto non è esplosivo, è tuttavia possibile la formazione di miscele di vapori/aria esplosive.

· **Limiti di infiammabilità:**

**Inferiore:** 5,5 Vol %

**Superiore:** 44 Vol %

· **Tensione di vapore a 20 °C:** 128 hPa

· **Densità a 20 °C:** 0,79 g/cm<sup>3</sup>

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· <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>	
<b>Dinamica:</b>	Non definito.
<b>Cinematica:</b>	Non definito.
· <b>Tenore del solvente:</b>	
<b>Solventi organici:</b>	100,0 %
<b>VOC (CE)</b>	100,00 %
· <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:**

**67-56-1 metanolo**

Orale	LD50	5628 mg/kg (rat)
Cutaneo	LD50	15800 mg/kg (rabbit)

- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea** Non ha effetti irritanti.
- **Lesioni oculari gravi/irritazioni oculari gravi** Irritante.
- **Sensibilizzazione respiratoria o cutanea** Non si conoscono effetti sensibilizzanti.

### 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

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- Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
- **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

- |   |   |
|---|---|
| · <b>14.1 Numero ONU</b>  |   |
| · <b>ADR, IMDG, IATA</b>  | UN1230  |
| · <b>14.2 Nome di spedizione dell'ONU</b>   |   |
| · <b>ADR</b>  | 1230 METANOLO   |
| · <b>IMDG, IATA</b>   | METHANOL  |
| · <b>14.3 Classi di pericolo connesso al trasporto</b>                              |   |
| · <b>ADR</b>  |   |
|  |  |
| · <b>Classe</b>   | 3 Liquidi infiammabili  |
| · <b>Etichetta</b>  | 3+6.1   |
| · <b>IMDG</b>   |   |
|  |  |
| · <b>Class</b>  | 3 Liquidi infiammabili  |
| · <b>Label</b>  | 3/6.1   |
| · <b>IATA</b>   |   |
|  |  |
| · <b>Class</b>  | 3 Liquidi infiammabili  |
| · <b>Label</b>  | 3 (6.1)   |
| · <b>14.4 Gruppo di imballaggio</b>   |   |
| · <b>ADR, IMDG, IATA</b>  | II  |

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· <b>14.5 Pericoli per l'ambiente:</b>	
· <b>Marine pollutant:</b>	No
· <b>14.6 Precauzioni speciali per gli utilizzatori</b>	Attenzione: Liquidi infiammabili
· <b>Numero Kemler:</b>	336
· <b>Numero EMS:</b>	F-E,S-D
· <b>14.7 Trasporto di rifiuti secondo l'allegato II di MARPOL 73/78 ed il codice IBC</b>	Non applicabile.
· <b>Trasporto/ulteriori indicazioni:</b>	
· <b>ADR</b>	
· <b>Quantità limitate (LQ)</b>	1L
· <b>Quantità esenti (EQ)</b>	Codice: E2 Quantità massima netta per imballaggio interno: 30 ml Quantità massima netta per imballaggio esterno: 500 ml
· <b>Categoria di trasporto</b>	2
· <b>Codice di restrizione in galleria</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>UN "Model Regulation":</b>	UN1230, METANOLO, 3 (6.1), II

### SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Norme e legislazione su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** La sostanza non è contenuta
- **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)  
 VOC: Volatile Organic Compounds (USA, EU)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent

(continua a pagina 9)

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

Stampato il: 17.10.2015

Revisione: 17.10.2015

**Denominazione commerciale: MAY-GRUNWALD STAINING SOLUTION**

*Flam. Liq. 2: Flammable liquids, Hazard Category 2*  
*Acute Tox. 3: Acute toxicity, Hazard Category 3*  
*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*  
*STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1*

(Segue da pagina 8)

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# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.10.17

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### 1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명:** MAY-GRUNWALD STAINING SOLUTION
- **상품번호:** 26250-01
- **CAS-번호**  
67-56-1
- **EC 의번호:**  
200-659-6
- **색인 번호:**  
603-001-00-X
- **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    구분2                      H225 고인화성 액체 및 증기



두개골과 대퇴골

급성 독성(경구)    구분3                      H301 삼키면 유독함  
 급성 독성(경피)    구분3                      H311 피부와 접촉하면 유독함  
 급성 독성(흡입)    구분3                      H331 흡입하면 유독함



건강에 위험

표적장기-1회노출    구분1                      H370 신체 중에 손상을 일으킴

(2 쪽에 계속)

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**제품명: MAY-GRUNWALD STAINING SOLUTION**

(1 쪽부터계속)



심한 눈 손상/자극성 구분2 H319 눈에 심한 자극을 일으킴

- 라벨표기 요소
- GHS 라벨 요소
- 그림문자



GHS02



GHS06



GHS08

- 신호어 위험
- 상표상에명확히위험성이표시된성분:

Methyl Alcohol

- 유해.위험 문구

고인화성 액체 및 증기  
삼키거나 피부에 접촉하거나 흡입하면 유독함.  
눈에 심한 자극을 일으킴  
신체 중에 손상을 일으킴

- 예방조치 문구

열·스파크·화염·고열로부터 멀리하시오 – 금연  
폭발 방지용 전기·환기·조명·장비를 사용하시오.  
삼켰을 시: 즉시 독성물질센터/병원 연락 필요.  
피부(모발)에 접촉 시: 모든 오염된 옷을 즉시 벗으시오 피부를 물/샤워로 행구시오.  
잠금장치가 있는 저장장소에 저장하시오.  
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

- 화학적 특성: 화학물질
- CAS-번호표시  
67-56-1 Methyl Alcohol
- 식별 번호
- EC 의번호: 200-659-6
- 색인 번호: 603-001-00-X

### 4 응급조치 요령

- 응급조치요령 내용

- 일반적 정보:

이제품에 의해 오염된 의상은 즉시제거한다.  
반드시 오염된 의상을 완전히 제거한 후에 호흡보호기를 떼어낸다.  
불규칙적인호흡이나 호흡정지상태에서는 인공호흡을 실시한다.

(3 쪽에계속)

# 안전지침서

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**제품명: MAY-GRUNWALD STAINING SOLUTION**

(2 쪽부터계속)

- **흡입했을 때:**  
신선한 공기나 산소를 공급받고, 의료진의 도움을 구한다.  
환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.
- **피부에 접촉했을 때:** 즉시 물과 비누로 씻고 잘 행군다.
- **눈에 들어갔을 때:** 흐르는 물에 눈을 몇분동안 씻어내고 나서, 증상이 지속될 경우에는 의사와 상담한다.
- **먹었을 때:** 구토를 유발시키지 않는다. 즉시 의료진의 도움을 구한다.
- **기타 의사의 주의사항:**
- **가장 중요한 급·만성 증상 및 영향** 추가적인 정보가 존재하지 않습니다.
- **즉각적인 의료처리 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다.

### 5 폭발.화재시 대처방법

- **소화제**
- **적절한 소화제:**  
이산화탄소, 진화용 석회가루 또는 물방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올이 함유된 거품으로 끈다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
- **소방관에 대한 권고사항**
- **화재 진압 시 착용할 보호구 및 예방조치:** 호흡보호장비설치.

### 6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급처리 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.  
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.  
충분한 환기가 되도록 한다.
- **타 섹션 참조**  
안전관리에 대한 정보는 제7장을 참고하십시오.  
개인보호장비에 대한 정보는 제8장을 참고하십시오.  
쓰레기처리에 대한 정보는 제13장을 참고하십시오.

### 7 취급 및 저장방법

- **취급:**
- **안전 취급을 위한 예방조치**  
작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.  
조심스럽게 용기를 개봉하거나 취급한다.  
연무질이 형성되는 것을 피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:**  
발화요소는 멀리 둔다. 금연.  
열로부터 보호한다.  
정전기의 충전으로부터 보호한다.  
호흡보호장비를 항상 비치한다.
- **혼합위험성 등 안전 저장 조건**
- **보관:**
- **안전한 저장 방법:** 차가운 장소에 보관한다.
- **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필요없음

(4 쪽에 계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.10.17

개정: 2015.10.17

**제품명: MAY-GRUNWALD STAINING SOLUTION**

(3 쪽부터계속)

- **보관 조건에 관한 추가적인 정보:**  
 용기를새지않게밀폐한채보관한다.  
 밀폐된 용기속에서늘 하고 건조 하게 보관 한다.  
 열이나직사광선으로부터보호한다.
- **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

### 8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이상 의 자료는 없음. 항 목 7 을 참고하시 오.

· **통제 변수**

- **화학물질의 노출기준, 생물학적 노출기준 등:**

**67-56-1 Methyl Alcohol**

TLV (ROK)	단기간의값: 310 mg/m <sup>3</sup> , 250 ppm 장기간의값: 260 mg/m <sup>3</sup> , 200 ppm Skin
IOELV (EU)	장기간의값: 260 mg/m <sup>3</sup> , 200 ppm Skin
PEL (USA)	장기간의값: 260 mg/m <sup>3</sup> , 200 ppm
REL (USA)	단기간의값: 325 mg/m <sup>3</sup> , 250 ppm 장기간의값: 260 mg/m <sup>3</sup> , 200 ppm Skin
TLV (USA)	단기간의값: 328 mg/m <sup>3</sup> , 250 ppm 장기간의값: 262 mg/m <sup>3</sup> , 200 ppm Skin; BEI

- **추 가 정보:** 제 조 할 당시에 유 효 한 목 록 을 기 초 로 사 용 했 다.

· **노출 통제**

· **개인 보호구**

· **일반적보호조치및위생조치:**

- 식료품, 음료수와 사료로부터 멀리 떨어져 두어 놓는다.
- 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.
- 휴식전이나 작업이 끝날때마다 손을 씻는다.
- 방호복은 따로 보관한다.
- 눈과의 접촉을 피한다.
- 눈과 피부와의 접촉을 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 혼합 물에 적합한 장갑재질에 대한 추천이 없다.  
 투과 시간, 침투율 과 저하를 고려해서 장갑 재료를 선택한다.

· **장갑의재료**

적합한장갑의선택은재질차이뿐아니라품질기준의차이도 고려하여 이루어져야 하고제조업자에따라서도 다르게선정되어야한다.

- **장갑 재료의 투과시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

(5 쪽에계속)

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**제품명: MAY-GRUNWALD STAINING SOLUTION**

· 눈 보호:

(4 쪽부터계속)



· 팍조이는보안경

### 9 물리화학적 특성

· 기본 물리 및 화학적 특성에 대한 정보	
· 일반정보	
· 외형	
· 물리적 상태:	액체
· 색:	푸른
· 냄새:	찌르는 듯한
· 후각역치	알맞지않다.
· pH:	알맞지않다.
· 상태변화	
· 녹는점/어는점:	-98 °C
· 초기 끓는점과 끓는점 범위:	64.7 °C
· 인화점:	11 °C
· 인화성(고체, 기체):	해당사항 없음.
· 점화온도:	455 °C
· 분해 온도:	알맞지않다.
· 자기점화:	알맞지않다.
· 폭발위험:	이제품은폭발위험성이없지만, 폭발가능성이있는증기화합물/공기화합물의형성가능성이있다.
· 인화 또는 폭발 범위의 상한/하한	
· 아래로:	5.5 Vol %
· 위로:	44 Vol %
· 증기압 의경우 20 °C:	128 hPa
· 밀도 의경우 20 °C:	0.79 g/cm <sup>3</sup>
· 비중:	알맞지않다.
· 증기밀도:	알맞지않다.
· 증발 속도:	알맞지않다.
· 용해도:	
· 물:	완전히혼합할수있는
· n 옥탄올/물 분배계수:	알맞지않다.
· 점도:	
· 역학성:	알맞지않다.
· 동점성:	알맞지않다.
· 용매내용물	
· 유기용매:	100.0 %
· VOC (EU)	100.00 %

(6 쪽에계속)





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**제품명: MAY-GRUNWALD STAINING SOLUTION**

(6 쪽부터계속)

- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.
- 추천 세정제: 경우에따라서세제가첨가된물

### 14 운송에 필요한 정보

· 유엔 번호 · ADR, IMDG, IATA	UN1230
· UN 적정 선적명 · ADR · IMDG, IATA	1230 METHANOL METHANOL
· 교통 위험 클래스 · ADR	
	
· 등급 · 위험물 라벨	3 발화성용액 3+6.1
· IMDG	
	
· Class · Label	3 발화성용액 3/6.1
· IATA	
	
· Class · Label	3 발화성용액 3 (6.1)
· 용기등급 · ADR, IMDG, IATA	II
· 환경적 유해물질: · 해양오염물질:	아니오
· 이용자 특별 예방조치 · 위험 코드: · EMS-번호:	경고: 발화성용액 336 F-E,S-D
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.

(8 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.10.17

개정: 2015.10.17

**제품명: MAY-GRUNWALD STAINING SOLUTION**

(7 쪽부터계속)

**· 운 송/추가 정보:**

· <b>ADR</b>	
· <b>한정 수량 (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>운송 구분</b>	2
· <b>터널 제한 코드</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>UN "모범 규제":</b>	UN1230, METHANOL, 3 (6.1), II

### 15 법적 규제현황

· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률

· **Korean Existing Chemical Inventory**

67-56-1	Methyl Alcohol	KE-23193
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· **GHS 라벨 요소**

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

· **위험 도표**



GHS02    GHS06    GHS08

· **표지어 위험**

· **상표상에명확히위험성이표시된성분:**

Methyl Alcohol

· **위험 문구**

- 고인화성 액체 및 증기
- 삼키거나 피부에 접촉하거나 흡입하면 유독함.
- 눈에 심한 자극을 일으킴
- 신체 중에 손상을 일으킴

· **주의 문구**

- 열·스파크·화염·고열로부터 멀리하시오 – 금연
- 폭발 방지용 전기·환기·조명·장비를 사용하시오.
- 삼켰을 시: 즉시 독성물질센터/병원 연락 필요.
- 피부(모발)에 접촉 시: 모든 오염된 옷을 즉시 벗으시오 피부를 물/샤워로 행구시오.
- 잠금장치가 있는 저장장소에 저장하시오.
- 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

KR

(9 쪽에계속)

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.10.17

개정: 2015.10.17

**제품명: MAY-GRUNWALD STAINING SOLUTION**

(8 쪽부터계속)

### 16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은  
기술하지않았으며계약적인법률관계에기반을두고있지도않다

- **최초 작성일자:** 2015.10.17
- **개정 횟수 및 최종 개정일자:** 1 / 2015.10.17
- **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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

인화성 액체 구분2: Flammable liquids, Hazard Category 2

급성 독성(경구) 구분3: Acute toxicity, Hazard Category 3

심한 눈 손상/자극성 구분2: Serious eye damage/eye irritation, Hazard Category 2

표적장기-1회노출 구분1: Specific target organ toxicity - Single exposure, Hazard Category 1

KR

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 17.10.2015

Revisión: 17.10.2015

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

#### · 1.1 Identificador del producto

· **Nombre comercial:** MAY-GRUNWALD STAINING SOLUTION

· **Número del artículo:** 26250-01

· **Número CAS:**

67-56-1

· **Número CE:**

200-659-6

· **Número de clasificación:**

603-001-00-X

· **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. 2 H225 Líquido y vapores muy inflamables.



GHS06 calavera y tibias cruzadas

Acute Tox. 3 H301 Tóxico en caso de ingestión.

Acute Tox. 3 H311 Tóxico en contacto con la piel.

Acute Tox. 3 H331 Tóxico en caso de inhalación.

( se continua en página 2 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

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Revisión: 17.10.2015

Nombre comercial: MAY-GRUNWALD STAINING SOLUTION

( se continua en página 1 )



GHS08 peligro para la salud

STOT SE 1 H370 Provoca daños en los órganos.



GHS07

Skin Irrit. 2 H315 Provoca irritación cutánea.

### · 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.

#### · Pictogramas de peligro



GHS02



GHS06



GHS08

#### · Palabra de advertencia Peligro

#### · Componentes peligrosos a indicar en el etiquetaje:

metanol

#### · Indicaciones de peligro

H225 Líquido y vapores muy inflamables.

H301+H311+H331 Tóxico en caso de ingestión, contacto con la piel o inhalación.

H315 Provoca irritación cutánea.

H370 Provoca daños en los órganos.

#### · Consejos de prudencia

P210 Mantener alejado del calor, de superficies calientes, de chispas, de llamas abiertas y de cualquier otra fuente de ignición. No fumar.

P241 Utilizar un material eléctrico, de ventilación o de iluminación/antideflagrante.

P301+P310 EN CASO DE INGESTIÓN: Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/médico.

P303+P361+P353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitar inmediatamente todas las prendas contaminadas. Aclararse la piel con agua/ ducharse.

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

67-56-1 metanol

#### · Número(s) de identificación

· Número CE: 200-659-6

( se continua en página 3 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 17.10.2015

Revisión: 17.10.2015

**Nombre comercial:** MAY-GRUNWALD STAINING SOLUTION

· **Número de clasificación:** 603-001-00-X

( se continua en página 2 )

### SECCIÓN 4: Primeros auxilios

· **4.1 Descripción de los primeros auxilios**

· **Instrucciones generales:**

Quitarse de inmediato toda prenda contaminada con el producto.

Antes de quitarse la protección respiratoria, quítese la ropa contaminada.

En caso de respiración irregular o apnea (paro respiratorio), hágase la respiración artificial.

· **En caso de inhalación del producto:**

Suministrar aire fresco u oxígeno; solicitar ayuda médica.

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. En caso de trastornos persistentes consultar un médico.

· **En caso de ingestión:** No provocar el vómito y solicitar asistencia médica inmediata.

· **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.

### 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:** Colocarse la protección respiratoria.

### 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).

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.

( se continua en página 4 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

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**Nombre comercial:** MAY-GRUNWALD STAINING SOLUTION

( se continua en página 3 )

Abrir y manejar el recipiente con cuidado.

Evitar la formación de aerosoles.

· **Prevención de incendios y explosiones:**

Mantener alejadas las fuentes de encendido. No fumar.

Proteger del calor.

Tomar medidas contra las cargas electrostáticas.

Tener preparados los aparatos respiratorios.

· **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**

· **Almacenamiento:**

· **Exigencias con respecto al almacén y los recipientes:** Almacenar en un lugar fresco.

· **Normas en caso de un almacenamiento conjunto:** No es necesario.

· **Indicaciones adicionales sobre las condiciones de almacenamiento:**

Mantener el recipiente cerrado herméticamente.

Almacenarlo en envases bien cerrados en un lugar fresco y seco.

Proteger del calor y de la luz directa del sol.

· **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.

· **8.1 Parámetros de control**

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

**67-56-1 metanol**

LEP	Valor de larga duración: 266 mg/m <sup>3</sup> , 200 ppm vía dérmica, VLB, VLI
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· **Componentes con valores límite biológicos:**

**67-56-1 metanol**

VLB	15 mg/l Muestra: orina Momento de Muestero: Final de la jornada laboral Indicador Biológico: Metanol
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· **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.

Guardar la ropa protectora por separado.

Evitar el contacto con los ojos.

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

( se continua en página 5 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 17.10.2015

Revisión: 17.10.2015

**Nombre comercial: MAY-GRUNWALD STAINING SOLUTION**

( se continua en página 4 )

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: Azul

· **Olor:** Penetrante

· **Umbral olfativo:** No determinado.

· **valor pH:** No determinado.

· **Cambio de estado**

Punto de fusión /campo de fusión: -98 °C

Punto de ebullición /campo de ebullición: 64,7 °C

· **Punto de inflamación:** 11 °C

· **Inflamabilidad (sólido, gaseiforme):** No aplicable.

· **Temperatura de ignición:** 455 °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: 5,5 Vol %

Superior: 44 Vol %

· **Presión de vapor a 20 °C:** 128 hPa

· **Densidad a 20 °C:** 0,79 g/cm<sup>3</sup>

· **Densidad relativa** No determinado.

· **Densidad de vapor** No determinado.

· **Velocidad de evaporación** No determinado.

( se continua en página 6 )



# Ficha de datos de seguridad

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Nombre comercial: MAY-GRUNWALD STAINING SOLUTION

( se continua en página 5 )

- |  |  |
|--|--|
| · Solubilidad en / miscibilidad con agua:  | Completamente mezclable.                     |
| · Coeficiente de reparto (n-octanol/agua): | No determinado.                              |
| · Viscosidad:                              |  |
| Dinámica:                                  | No determinado.                              |
| Cinemática:                                | No determinado.                              |
| · Concentración del disolvente:            |  |
| Disolventes orgánicos:                     | 100,0 %                                      |
| VOC (CE)                                   | 100,00 %                                     |
| · 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:

#### 67-56-1 metanol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- Efecto estimulante primario:
- Corrosión o irritación cutáneas No produce irritaciones.
- Lesiones o irritación ocular graves Produce irritaciones.
- Sensibilización respiratoria o cutánea No se conoce ningún efecto sensibilizante.

### 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.

( se continua en página 7 )

**Ficha de datos de seguridad**  
según 1907/2006/CE, Artículo 31

fecha de impresión 17.10.2015

Revisión: 17.10.2015

**Nombre comercial: MAY-GRUNWALD STAINING SOLUTION**




( se continua en página 6 )

- **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** UN1230
- **14.2 Designación oficial de transporte de las Naciones Unidas**  
· **ADR** 1230 METANOL  
· **IMDG, IATA** METHANOL
- **14.3 Clase(s) de peligro para el transporte**
- **ADR**
- 
  - **Clase** 3 Líquidos inflamables
  - **Etiqueta** 3+6.1
- **IMDG**
- 
  - **Class** 3 Líquidos inflamables
  - **Label** 3/6.1
- **IATA**
- 
  - **Class** 3 Líquidos inflamables
  - **Label** 3 (6.1)
- **14.4 Grupo de embalaje**  
· **ADR, IMDG, IATA** II

( se continua en página 8 )

# Ficha de datos de seguridad

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Nombre comercial: MAY-GRUNWALD STAINING SOLUTION

( se continua en página 7 )

· <b>14.5 Peligros para el medio ambiente:</b>	
· <b>Contaminante marino:</b>	No
· <b>14.6 Precauciones particulares para los usuarios</b>	Atención: Líquidos inflamables
· <b>Número Kemler:</b>	336
· <b>Número EMS:</b>	F-E,S-D
· <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>	1L
· <b>Cantidades exceptuadas (EQ)</b>	Código: E2 Cantidad neta máxima por envase interior: 30 ml Cantidad neta máxima por embalaje exterior: 500 ml
· <b>Categoría de transporte</b>	2
· <b>Código de restricción del túnel</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>"Reglamentación Modelo" de la UNECE:</b>	UN1230, METANOL, 3 (6.1), 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**
- **Directiva 2012/18/UE**
- **Sustancias peligrosas nominadas - ANEXO I** No contiene la sustancia.
- **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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

STOT-SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1