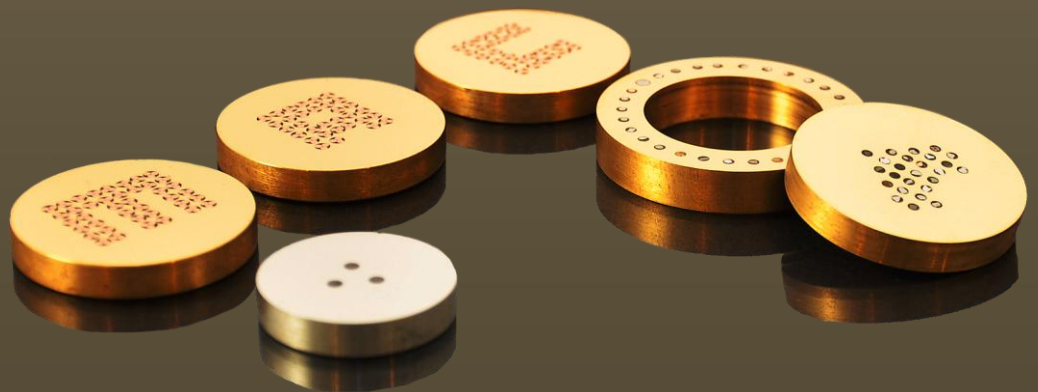




**Electron
Microscopy
Sciences**

Reference Standards
For
X - Ray Micro - Analysis



Micro-Analysis Consultants Limited

For the past 30 years, M.A.C. has produced Reference and Calibration Standards for Electron Microscopy users worldwide. We are recognised as a leading supplier of EDX, WDX and SEM standards, as well as supplying standards for Auger, TEM, STEM, XRF and BSED based microanalysis systems.

M.A.C. only purchases reference samples from leading suppliers to ensure consistently high quality. With samples mounted into brass blanks in our own modern factory; diamond polished to a ¼ micron finish and coated with carbon by our experienced team.

Each block of standards has its own unique number allocated to it, and comes with a map for standard identification. As a result of these tight controls, we are able to trace each of our manufactured blocks right back to the first block of standards produced in 1981.

All the standards are supplied with a certificate of analysis with a large number of these standard materials traceable to a national institution, as a standard reference material (SRM). All standards manufactured are tested with our own analysis/SEM equipment prior to shipping.

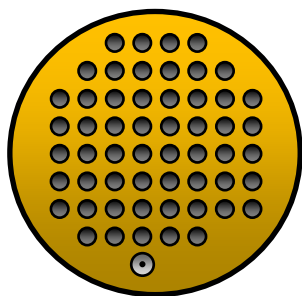
With this attention to detail M.A.C. has gained a reputation for unsurpassed technical excellence and whilst uncompromising on its approach to quality, appreciates the importance of realistic delivery schedules. In April 1997 we also proudly attained ISO 9001 accreditation.

Whilst we have over 500 different standard materials to choose from; which includes Rare Earth, Synthetic Compounds, Pure materials, Natural Minerals, Steels and Alloys, we are realistic that we may not have the material you require. In these instances, every endeavour will be made to try and source it.

Universal Standard Blocks

Our Universal Standard blocks have been produced to incorporate an extensive selection of elements from across the periodic table, with a number of them focusing on specialized areas. With input from leading manufacturers, respected professionals, analysts and Electron Microscopy Users worldwide, these standard blocks provide the end user with a comprehensive catalogue of reference materials.

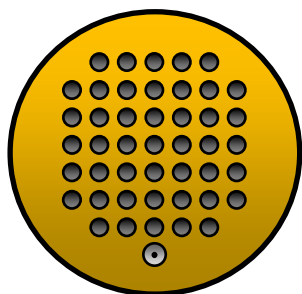
The Universal Standard blocks are usually manufactured on either a 25mm or 32mm diameter brass block, although, it is possible to mount them on alternative sizes depending on the requirements of our customer.



Universal Block

55 Standards + Faraday Cup

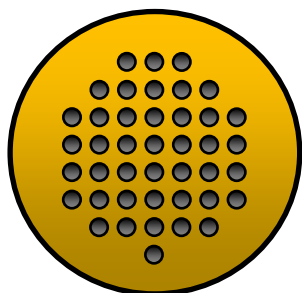
Available as: [UNI5532 - 32mm diameter block](#)



Universal Block

45 Standards + Faraday Cup

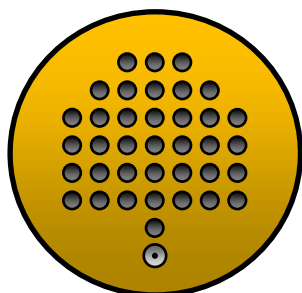
Available as: [UNI4532 - 32mm diameter block](#)
[UNI4525 - 25mm diameter block](#)



Universal Block

42 Standards

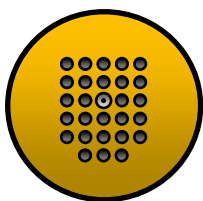
Available as: [UNI4232 - 32mm diameter block](#)
[UNI4225 - 25mm diameter block](#)



Universal Block

37 Standards + Faraday Cup

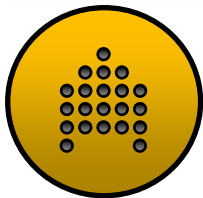
Available as: [UNI3732 - 32mm diameter block](#)
[UNI3725 - 25mm diameter block](#)



Mineral Block

27 Standards + Faraday Cup

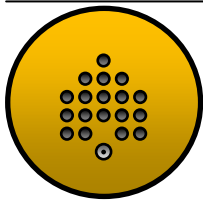
Available as: [MIN32](#) - 32mm diameter block
[MIN25](#) - 25mm diameter block



Semi-Conductor Block

21 Standards

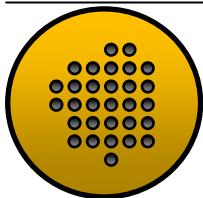
Available as: [SCR32](#) - 32mm diameter block
[SCR25](#) - 25mm diameter block



Biological Block

18 Standards + Faraday Cup

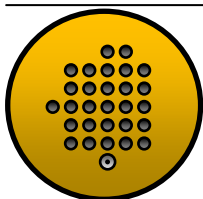
Available as: [BGL32](#) - 32mm diameter block
[BGL25](#) - 25mm diameter block



Sulphide Minerals/Heavy Metals Block

30 Standards

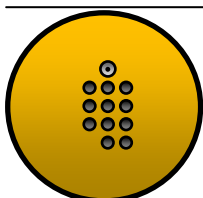
Available as: [SMH32](#) - 32mm diameter block
[SMH25](#) - 25mm diameter block



Geo Mk II Block

28 Standards + Faraday Cup

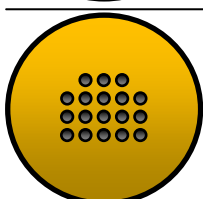
Available as: [GGL32](#) - 32mm diameter block
[GGL25](#) - 25mm diameter block



Low Carbon Analysis Block

11 Standards + Faraday Cup

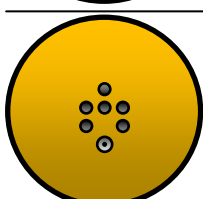
Available as: [LCA32](#) - 32mm diameter block
[LCA25](#) - 25mm diameter block



Rare Earth Block

18 Standards

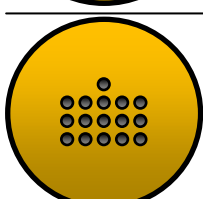
Available as: [REE32](#) - 32mm diameter block
[REE25](#) - 25mm diameter block



Rare Earth REE-glass Block (multi 4% each)

6 Standards + Faraday Cup

Available as: [REM32](#) - 32mm diameter block
[REM25](#) - 25mm diameter block



Rare Earth REE-glass Block (12% each)

16 Standards

Available as: [RES32](#) - 32mm diameter block
[RES25](#) - 25mm diameter block

Customised Blocks

Although our Universal Standard blocks are extremely comprehensive, M.A.C. are aware that they do not always provide the specialization that some users require. This is why M.A.C. is happy to work directly with you to help to produce a set of standards as unique as the environment in which they are to be used and reflect the requirements which have been identified.

We are able to produce/manufacture blocks for all microanalysis instrumentation or customised mounts specially designed and manufactured. Block material can be as specific as the standards which are mounted and we are able to offer blocks in Brass, Aluminium or Stainless Steel.

When enquiring about custom built blocks, we would ask that the following information is provided, to help you with the most appropriate solution.

1. **Make and model of instrument in which standards are to be used.**
2. **Specify quantity and standard materials required.**
3. **Outer diameter of block or individual required.**
4. **Inner diameter where appropriate.**
5. **Thickness of block (5mm normally supplied).**
6. **Material of the block to be used (normally Brass)**
7. **Whether a Faraday Cup is required.**
8. **Any limitation of the X and Y- movements of the stage.**
9. **The Standard Block type number where possible**
10. **Any additional requirements.**

Customised Standards – Single

Individual standards are usually supplied as 2, 3 or 5mm diameter brass tube. Although they can be mounted in any size block.

Unmounted standards

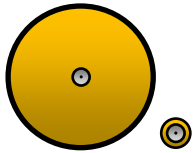
We are also able to offer unmounted samples/grains of certified materials which are available. Grains are usually 2mm³ in size.

Customised Standards - Multiple

Multiple standards mounted in a single block. The numbers of standards mounted are dependent on the dimensions of the block. These range from 10mm - 32mm are usually 5mm thick, although, blocks can be manufactured to your specific requirements.

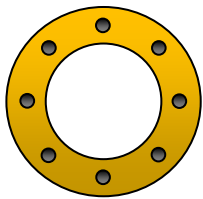
Auger Standards

Auger Blocks are manufactured from AISI 304 austenitic Stainless Steel with standards embedded with woods metal (Bismuth, Lead, Tin and Cadmium Alloy). Up to 50 standards can be set into one of these blocks, however, the actual number achievable will be dependent on the shape and size of the block.



Faraday Cup

A Faraday Cup is used for measuring the beam current at the specimen plane. The beam of electrons is focused inside the hole by increasing magnification so that when the hole fills the screen all the electrons are trapped and a true measure of current is achieved. The hole size of the Faraday Cup is 150µm. The Faraday Cup can be added to a block of standards or can be supplied as a single; as a single it can be set in any size block required.



Carousel Configuration

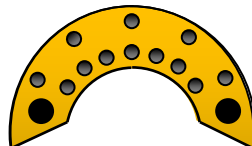
These blocks offer the user the opportunity to extend the current block of standards by adding one or more standards to their existing set of standards. The carousel is able to nestle around the outside of the users original block. These blocks are custom made and therefore the original block dimensions are required. The number of standards which can be embedded in this type of standard is dependent on the dimensions required.

Specially Manufactured Block

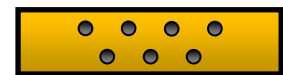
If our range of mounts do not accommodate your requirements, we would be happy to work with you to provide your exact requirements. Examples are detailed below.



Available as: JL-01



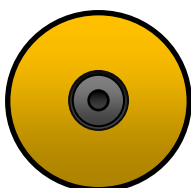
Available as: JL-03



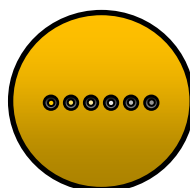
Available as: JL-02

NIST Standard Sets

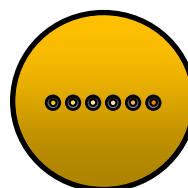
The following sets are only available as sets of standards. These can be ordered as an individual set of standards (as shown) or be added to a block of standards.



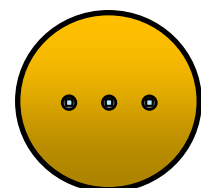
SRM 480



SRM 481



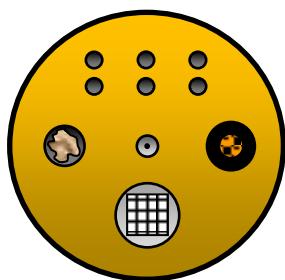
SRM 482



SRM 1872

Calibration Standards

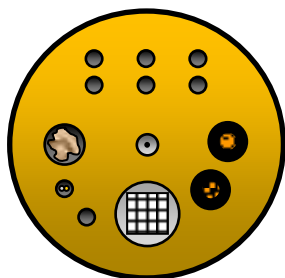
These standards allow users of a Scanning Electron Microscope to check the performance of their instrument, ensuring that it is working within the specifications set out by the manufacturer. These standards are extremely useful and allow users such as Researchers, Technologists, Quality Assurance Departments and SEM users with Energy Dispersive or Wavelength Dispersive X-ray systems fitted, to quickly assess their current operating conditions and adjust parameters to optimize them.



Quality Control Testing Block - A

Available as: [QCT/A - 32mm diameter x 8mm block](#)

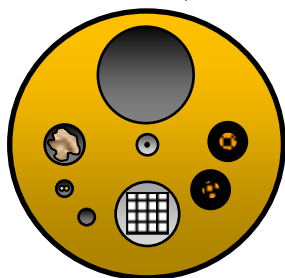
6 Standards (customer choice), Faraday Cup^{*1}, Silicon Grid^{*2}, Duplex Brass^{*3} & Resolution Standard (low, medium or high)^{*4}



Quality Control Testing Block - B

Available as: [QCT/B - 32mm diameter x 8mm block](#)

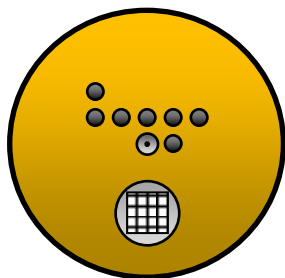
6 Standards (customer choice), Faraday Cup^{*1}, Silicon Grid^{*2}, Duplex Brass^{*3}, Resolution Standard (low, medium, high)^{*4}, BSD Reference Standard^{*5} & 3mm Accessory Hole



Quality Control Testing Block - C

Available as: [QCT/C - 50mm diameter x 8mm block](#)

Block of Standards^{*6}, Faraday Cup^{*1}, Silicon Grid^{*2}, Duplex Brass^{*3}, Resolution Standard (low, medium, high)^{*4}, BSD Reference Standard^{*5} & 3mm Accessory Hole



Quality Control Testing Block - EDX

Available as: [EDXCAL - 25mm diameter x 5mm block](#)

7 Standards (Mn, Cr, C, Ni, PTFE, Co, Almandine Garnet), Faraday Cup^{*1} & Silicon Grid^{*2}

-
-
1. A Faraday Cup is used for measuring the beam current at the specimen plane. The beam of electrons is focused inside the hole by increasing magnification so that when the hole fills the screen all the electrons are trapped and a true measure of current is achieved. The hole size of the Faraday Cup is 150 μ m
 2. The Silicon Test Specimen is made of single crystal silicon of overall dimension 5mm x 5mm. It is marked with clearly visible squares of periodicity 10 μ m. The dividing lines are about 1.9 μ m in width and are formed by electron beam lithography. A broader marking line is written every 500 μ m, which is a very useful additional feature for light microscopy.
 3. The Duplex Brass standard allows for checking the resolution and performance of the Backscattered Electron Detector. The resolution of a detector is usually quoted as 0.1 (Z) where the atomic number (Z)=30. This is obtained in our standard by the mean atomic number between phases of α/β Brass, being 0.1Z
 4. Resolution standards are used for testing the resolved gaps and the number of grey levels in an image. This is to ensure that the resolution has not been distorted by using contrast to maximise the visibility of edges. These are available as either gold crystals or tin spheres on a carbon substrate. Gold on carbon is available in different particle size ranges, enabling it to cover the full resolution range.
 5. The BSD reference standards are used for checking the contrast efficiency of Backscattered Detectors. Each of the reference specimens consists of two high purity elements that have an atomic number difference of 1.
 6. Standard hole, allows for the insertion of a block of standards 25mm or 32mm diameter x 5mm thick brass block which allows calibration and test standards to be kept together

All of the items listed 1 - 5 can be included in any custom built block

Backscattered Electron Detector Standards

An electron microscope, when equipped with a Backscattered Electron Detector, has the capacity to produce images in which contrast is controlled by the differences in atomic numbers (Z) across the specimen. We currently have four reference specimens which are available for testing the atomic number contrast performance of backscattered electron detection systems.

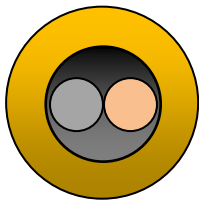
Each of the reference specimens consists of two high purity elements that have an atomic number difference of 1. They are embedded side by side in a contrasting matrix and are available as a single mount or can be incorporated into a block of standards.



Atomic Number Contrast Reference Standard

Aluminium / Silicon (atomic numbers 13/14)

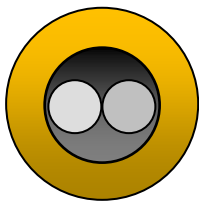
[Available as: ANC1314 - 5mm diameter x 5mm Brass Tube](#)



Atomic Number Contrast Reference Standard

Nickel / Copper (atomic numbers 28/29)

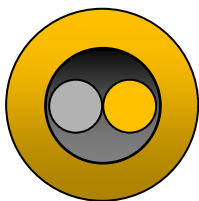
[Available as: ANC2829 - 5mm diameter x 5mm Brass Tube](#)



Atomic Number Contrast Reference Standard

Palladium / Silver (atomic numbers 46/47)

[Available as: ANC4647 - 5mm diameter x 5mm Brass Tube](#)



Atomic Number Contrast Reference Standard

Platinum / Gold (atomic numbers 78/79)

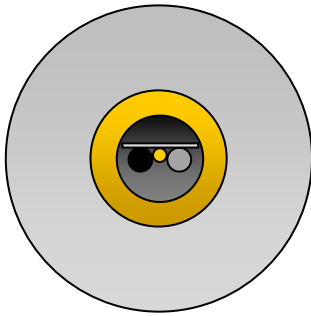
[Available as: ANC7879 - 5mm diameter x 5mm Brass Tube](#)



Duplex Brass Standard

Available as: [DBR5MM](#) - 5mm diameter x 5mm Brass Tube

This standard allows for checking the resolution and performance of the Backscattered Electron Detector. The resolution of a detector is usually quoted as 0.1 (Z) where the atomic number (Z)=30. This is obtained in our standard by the mean atomic number between phases of α/β Brass, being 0.1Z



Particle Analysis Standard

Available as: [PARTICLE](#) - 13mm diameter Aluminium Pin Stub

This standard allows the user to set the grey levels for Backscatters as it goes across all grey areas.



B. S. E. Detector Calibration Standard

Available as: [BSE30C](#) - 30mm diameter x 5mm Carbon Block

The test sample enables the performance of Backscattered Detectors to be verified. The test sample consists of Carbon, Duplex Brass, Faraday Cup and the 4 atomic number reference standards which can be used to verify the performance or act as a quantitative reference.

X-ray Fluorescence Spectroscopic Standards

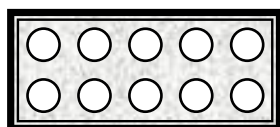
A large range of high purity single element standards for the setting up, calibration and routine instrument monitoring of X-ray Fluorescence spectrometers are available.

These standards are supplied as 1 ¼" diameter pressed pellets or where appropriate metal foils and are prepared from carefully selected elements and compounds to ensure interference free spectra. Each pellet is supported by a thin-walled aluminium cup which affords protection from damage during handling. The precious metal foils are approximately 0.125mm thick and are stretched across plastic supports.

Standards are available for 60 elements and can be purchased individually or as a set.



Single Standard

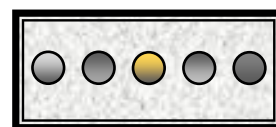


XRF Standard Set

Rare Earth

10 standards

Available as: [XRFRE](#)

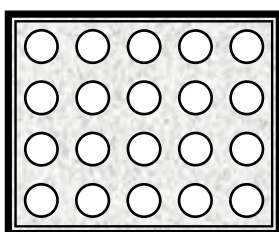


XRF Standard Set

Precious Metal

5 standards

Available as: [XRFPM](#)

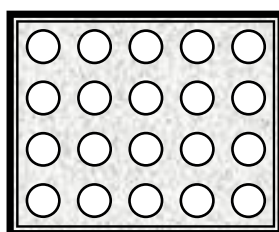


XRF Standard Set

Universal

20 standards

Available as: [XRFUNI](#)

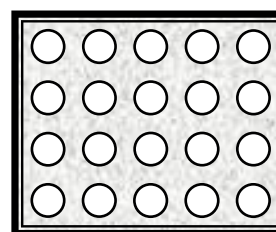


XRF Standard Set

Set A

20 standards

Available as: [XRFA](#)



XRF Standard Set

Set B

20 standards

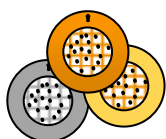
Available as: [XRFB](#)

Transmission Electron Microscopy

Thin Films

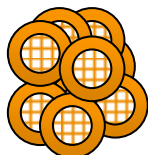
These standards are supplied as fine powders dispersed onto holey carbon films and are selected from a range of certified materials and synthetic compounds. They are supplied on 3.05mm grids.

Normally the holey carbon films are supported by 400 mesh copper grids although alternative grid materials can be specified



Thin Film Standards - Single

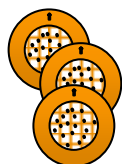
Available as: [FILM1](#)



Thin Film Standards Set - Universal

25 Standards

Available as: [FILM25](#) - 3.05mm diameter grids



Thin Film Standards Set - Rare Earth

14 Standards

Available as: [FILM14](#) - 3.05mm diameter grids

Thin Foils

These are high purity metal foils, each measuring 3mm diameter x 0.1mm thick which fit into TEM grid holders for use in the STEM mode.



Thin Foil Standards - Single

Available as: [Foil1](#)



Thin Foil Standards Set - Rare Earth

25 Standards

Available as: [FOIL25](#) - 3mm diameter x 0.1mm foil

Refurbishment Service

Our refurbishment service includes the re-polishing of the standard block, reapplication of the carbon coating and checking the certificate of analysis.

Once your standard has been received at M.A.C. a full inspection is carried out to identify any imperfections which may have occurred since the blocks original manufacture, or since a previous refurbishment. You will then be advised of any additional work required, as a result of the inspection, to enable us to return the block of standards to its original condition prior to the commencement of any work. Only work which has been authorized will be carried out.

We recommend that standards are returned every 2 years to ensure that they consistently deliver the results that are expected. With ISO certification playing a larger role in businesses worldwide, the returning of the standard for refurbishment can show your commitment to delivering part of the servicing requirement of this certification.

ISO Certification

Certificate of Registration



This is to certify that the Quality Management System of

Micro-Analysis Consultants Ltd
19 Edison Road, St. Ives, Cambridgeshire, PE27 3LF

applicable to

Manufacture of standards for micro analysis

has been assessed and registered by NQA against the provisions of

BS EN ISO 9001 : 2008

This registration is subject to the company maintaining a quality management system, to the above standard, which will be monitored by NQA.

Alan Ward

Certification Director



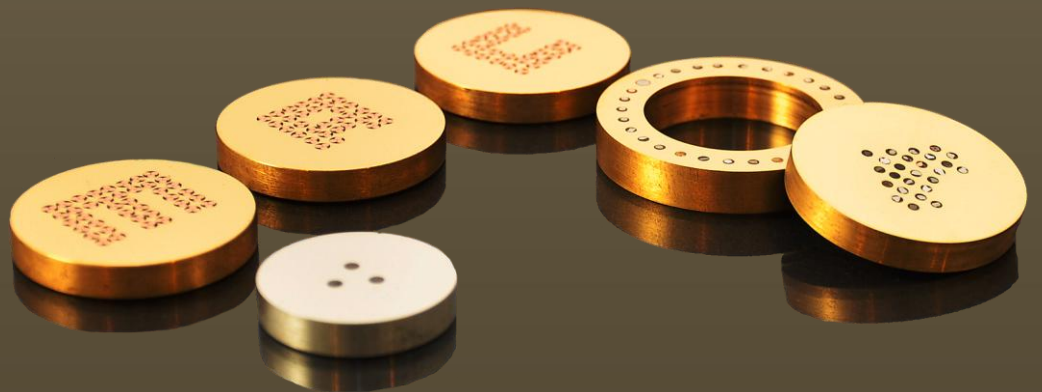
Certificate No: 8960
Date: 10 September 1997
Reissued: 12 October 2012
Valid Until: 12 October 2015
EAC Code: 19

The use of the UKAS Accreditation Mark indicates accreditation in respect of those activities covered by the accreditation certificate number 015 held by NQA.
NQA is a trading division of Ascotia Group Ltd, Registration No. 8253182. Registered Office: Warwick House, Houghton Hall Park, Houghton Regis, Dunstable, Bedfordshire, LU5 5DX.
This certificate is the property of NQA and must be returned on request.



**Electron
Microscopy
Sciences**

Material List



Pure Elements

Name	Formula	Suitability				
Aluminium	Al	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Antimony	Sb	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Arsenic	As	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Beryllium	Be	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Bismuth	Bi	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Boron	B	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Cadmium	Cd	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Carbon	C	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Chromium	Cr	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Cobalt	Co	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Copper	Cu	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Germanium	Ge	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gold	Au	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Hafnium	Hf	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Indium	In	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Iridium	Ir	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Iron	Fe	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Lead	Pb	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Magnesium	Mg	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Manganese	Mn	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Molybdenum	Mo	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Nickel	Ni	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Niobium	Nb	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>

Osmium	Os	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Palladium	Pd	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Platinum	Pt	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Rhenium	Re	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Rhodium	Rh	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Ruthenium	Ru	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Scandium	Sc	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Selenium	Se	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Silicon	Si	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Silver	Ag	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Tantalum	Ta	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Tellurium	Te	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Thallium	Tl	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Thulium	Tm	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tin	Sn	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Titanium	Ti	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Tungsten	W	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Vanadium	V	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Ytterbium	Yb	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Yttrium	Y	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Zinc	Zn	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input checked="" type="checkbox"/>
Zirconium	Zr	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input checked="" type="checkbox"/>	xrf <input type="checkbox"/>

Synthetic Compounds

Name	Formula	Suitability
Aluminium Fluoride	AlF ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Aluminium Nitride	AlN	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Aluminium Oxide	Al ₂ O ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Antimony (III) Sulphide	Sb ₂ S ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Barium Fluoride	BaF ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Barium Titanate (IV)	BaTiO ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Boron Carbide	B ₄ C	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Boron Nitride	BN	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Boron Trioxide	B ₂ O ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cadmium Selenide	CdSe	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cadmium Sulphide	CdS	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cadmium Telluride	CdTe	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Caesium Bromide	CsBr	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Caesium Iodide	CsI	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Caesium Nitrate	CsNO ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Calcium Fluoride	CaF ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Calcium Molybdate	CaMoO ₄	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Calcium Titanium Oxide	CaTiO ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Calcium Tungstate	CaWO ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerium (III) Fluoride	CeF ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerium (IV) Oxide	CeO ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerium Alumate	CeAl ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Chromium (III) Nitride	CrN	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>

Chromium Carbide	Cr ₃ C ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Chromium Nitride	CrN	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Cobalt (II) Oxide	CoO	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Cobalt Silicide	CoSi ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Copper (II) Oxide ACS	CuO	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Copper (II) Sulfide	CuS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Copper Iodide	CuI	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Copper Sulphate	CuSO ₄	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Dysprosium Fluoride	DyF ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Erbium Fluoride	ErF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Erbium Oxide	Er ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Europium (III) Oxide	Eu ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Europium Fluoride	EuF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gadolinium (III) Oxide	Gd ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gadolinium Fluoride	GdF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gallium Antimonide	GaSb	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gallium Arsenide	GaAs	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gallium Nitride	GaN	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gallium Oxide	Ga ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gallium Phosphide	GaP	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gallium Selenide	Ga ₂ Se ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Gallium Sulfide	GaS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Germanium (IV) Oxide	GeO ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Hafnium Oxide	HfO ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Holmium Fluoride	HoF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Holmium Oxide	Ho ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Indium Antimonide	InSb	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Indium Arsenide	InAs	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Indium Oxide	In ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Indium Phosphide	InP	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>

Indium Selenide	In ₂ Se ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Indium Sulfide	InS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Indium Telluride	In ₂ Te ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Iron (II) Sulphide	FeS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Iron Ferrous Oxide	FeO	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Iron Nitride	Fe ₄ N	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Iron Oxide	FeO	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Iron Oxide (Hematite)	Fe ₂ O ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Iron Phosphide	Fe ₂ P	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Iron Silicide	FeSi ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lanthanum (III) Oxide	La ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lanthanum Fluoride	LaF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lead (II) Telluride	PbTe	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lead Fluoride	PbF ₂	wdx <input type="checkbox"/>	edx <input type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lead Oxide	PbO	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lead Selenide	PbSe	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lead Sulphide	PbS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lithium Fluoride	LiF	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lithium Niobate	Li ₂ Nb ₂ O ₆	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lithium Tantalate	Li ₂ Ta ₂ O ₆	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lutetium Fluoride	LuF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lutetium Silicide	LuSi ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Magnesium Oxide	MgO	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Manganese (II) Carbonate	MnCO ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Manganese (II) Fluoride	MnF ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Manganese (II) Sulfide	MnS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Manganese (IV) Oxide	MnO ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Manganese Silicide	Mn ₁₅ Si ₂₆	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Manganese Titanate	MnTiO ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Mercury (II) Telluride	HgTe	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>

Mercury Oxide	HgO	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Mercury Sulphide (II) (black)	HgS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Mercury Sulphide (II) (Red)	HgS	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Molybdenum (IV) Sulphide	MoS2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Molybdenum (VI) Oxide	MoO3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Molybdenum Carbide	Mo2C	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Neodymium Fluoride	NdF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Neodymium Oxide	Nd2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Nickel Arsenide	NiAs	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Nickel Oxide	NiO	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Nickel Phosphide	Ni2P	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Nickel Silicide	Ni2Si	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Nickel Sulphate	NiSO4	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Niobium Oxide	Nb2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Niobium Oxide	Nb2O5	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Niobium Silicide	NbSi2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Polytetrafluoroethylene	PTFE	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Potassium Bromide	KBr	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Potassium Chloride	KCl	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Praseodymium Fluoride	PrF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Rubidium Bromide	RbBr	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Rubidium Iodide	RbI	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Rubidium Sulfate	Rb2SO4	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Samarium Fluoride	SmF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Samarium Oxide	Sm2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Scandium Oxide	Sc2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Silicon (IV) Oxide	SiO2	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Silicon Carbide	SiC	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Silicon Nitride	Si3N4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Silver (I) Chloride	AgCl	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>

Silver Sulphide	Ag ₂ S	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Silver Telluride	Ag ₂ Te	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Sodium Chloride	NaCl	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Sodium Fluoride	NaF	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Strontium Fluoride	SrF ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Strontium Nitrate	Sr(NO ₃) ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Strontium Titanate	SrTiO ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tantalum Nitride	TaN	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tantalum Pentoxide	Ta ₂ O ₅	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tantalum Silicide	TaSi ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tellurium (IV) Oxide	TeO ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Terbium Fluoride	TbF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Terbium Silicide	TbSi ₂	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thallium (I) Bromide	TlBr	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thallium (I) Iodine	TlI	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thallium Oxide	Tl ₂ O ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thulium Fluoride	TmF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thulium Silicide	TmSi ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tin (IV) Oxide	SnO ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Titanium (IV) Sulfide	TiS ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Titanium Carbide	TiC	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Titanium IV Oxide	TiO ₂	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Titanium Nitride	TiN	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Titanium Oxide	TiO	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tungsten Carbide	WC	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tungsten Silicide	WSi ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Uranium Oxide	UO ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Vanadium (V) Oxide	V ₂ O ₅	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Vanadium Carbide	VC	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Ytterbium Fluoride	YbF ₃	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>

Yttrium Oxide	Y2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zinc Oxide	ZnO	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zinc Selenide	ZnSe	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zinc Sulphide	ZnS	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zinc Telluride	ZnTe	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zirconium Boride	ZrB2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zirconium Carbide	ZrC	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zirconium Nitride	ZrN	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zirconium Oxide	ZrO2	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>

Natural Minerals

Name	Formula	Suitability
Alabandite	MnS	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Albite	NaAlSi ₃ O ₈	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Allanite	(Ce,Ca,Y,La) ₂ (Al,Fe ₃) ₃ (SiO ₄) ₃ (OH)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Almandine Garnet	Fe ₃ Al ₂ Si ₃ O ₁₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Alunite	KAl ₃ (SO ₄) ₂ (OH) ₆	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Analcime	NaAlSi ₂ O ₆ (H ₂ O)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Anatase	TiO ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Andradite	Ca ₃ Fe ₂ (SiO ₄) ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Anglesite	PbSO ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Anhydrite	CaSO ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Ankerite	Ca(Fe, Mg, Mn)(CO ₃) ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Anorthite	CaAl ₂ Si ₂ O ₈	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Antigorite	((Mg,Fe) ₃ Si ₂ O ₅ (OH) ₄)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Apatite	Ca ₅ (PO ₄) ₃ (F,Cl,OH)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Arsenopyrite	FeAsS	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Augite	(Ca, Mg, Fe) ₂ (SiAl) ₂ O ₆	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Azurite	Cu ₃ (OH) ₂ (CO ₃) ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Baddeleyite	ZrO ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Baryte	BaSO ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Bastnasite	(Ce,La,Y)CO ₃ F	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Benitoite	BaTi ₃ SiO ₉	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Beryl	Be ₃ Al ₂ Si ₆ O ₁₈	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Biotite	K(Mg,Fe) ₃ AlSi ₃ O ₁₀ (OH) ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>

Bismuthinite	Bi_2S_3	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Bornite	Cu_5FeS_4	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Bustamite	$(\text{Mn,Ca})\text{SiO}_3$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Calcite	CaCO_3	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cassiterite (Tin Oxide)	SnO_2	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Celestine	SrSO_4	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Celsian	$\text{Ba}(\text{Al}_2\text{Si}_2\text{O}_8)$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerussite	PbCO_3	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Chalcocite	Cu_2S	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Chalcopyrite	CuFeS_2	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Chlorite (Chamosite)	$(\text{Fe,Mg,Fe})_5\text{Al}(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH},\text{O})_8$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Chrome Diopside	$\text{Ca}(\text{Mg, Fe})\text{Si}_2\text{O}_6$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Chromite	FeCr_2O_4	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Chrysoberyl	BeAl_2O_4	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cinnabar	HgS	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cobaltite	CoAsS	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Columbite	FeNb_2O_6	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Covellite	CuS	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Crocoite	PbCrO_4	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cryolite	Na_3AlF_6	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cubic Zirconia	ZrSiO_4	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cuprite	Cu_2O	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Datolite	$\text{CaBSiO}_4(\text{OH})$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Diamond	C	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Diopside	$\text{Ca}(\text{Mg, Fe})\text{Si}_2\text{O}_6$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Dolomite	$\text{CaMg}(\text{CO}_3)_2$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Enstatite (Mg, Fe, Clinopyroxene)	$\text{Mg}_2\text{Si}_2\text{O}_6$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Epidote	$(\text{Ca}_2)(\text{Al}_2\text{Fe}_3)(\text{O},\text{OH},\text{SiO}_4,\text{Si}_2\text{O}_7)$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Ferroaxinite	$\text{Ca}_2\text{FeAl}_2\text{BO}_3\text{Si}_4\text{O}_{12}(\text{OH})$	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>

Ferrocolumbite	FeNb ₂ O ₆	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Fluorapatite	Ca(Sr,Na,Ca)(Ca,Sr,Ce) ₃ (PO ₄) ₃ F	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Fluorite	CaF ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Forsterite	Mg ₂ SiO ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Gahnite (Zinc Aluminium Oxide)	ZnAl ₂ O ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Galena	PbS	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Garnet Spessartine	Mn ₃ Al ₂ Si ₃ O ₁₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Goethite	FeO(OH)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Grossular	Ca ₃ Al ₂ (SiO ₄) ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Halite	NaCl	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Hedenbergite	CaFeSi ₂ O ₆	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Helvite	Mn ₄ Be ₃ (SiO ₄) ₃ S	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Hornblende	Ca ₂ (Mg, Fe, Al) ₅ (Al,Si) ₈ O ₂₂ (OH) ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Hydroxyapatite	Ca ₅ (PO ₄) ₃ (OH)	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Ilmenite	FeTiO ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Iodargyrite	AgI	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Jadeite	NaAl(Si ₂ O ₆)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Kaersutite	NaCa ₂ (Mg ₄ Ti)Si ₆ Al ₂ O ₂₃ (OH)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Kaolinite	Al ₂ Si ₂ O ₅ (OH) ₄	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Kyanite	Al ₂ SiO ₅	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Labradorite	(Ca,Na)(Si,Al) ₄ O ₈	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Leucite	KAlSi ₂ O ₆	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Magnesite	MgCo ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Magnetite	Fe ₃ O ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Malachite	Cu ₂ (OH) ₂ CO ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Marcasite	FeS ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Mesolite	Na ₂ Ca ₂ Al ₆ Si ₉ O ₃₀ .8(H ₂ O)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Microcline	KAlSi ₃ O ₆	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Molybdenite	MoS ₂	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Monazite	(Ce,La,Th,Nd,Y)PO ₄	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>

Monticellite	CaMgSiO ₄	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Muscovite	KAl ₂ (AlSi ₃ O ₁₀)	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Nickeline	NiAs	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Obsidian	SiO ₂	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Obsidian (Lipari)	70-75 SiO ₂ ,MgO,Fe ₃ O ₄	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Olivine	(Mg,Fe) ₂ SiO ₄	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Orthoclase	KAlSi ₃ O ₈	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Pentlandite	(Fe,Ni) ₉ S ₈	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Peridot	(Mg,Fe) ₂ SiO ₄	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Phlogopite	KMg ₃ (Si ₃ Al)O ₁₀ (F,OH) ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Pollucite	AlSi ₂ O ₆	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Proustite	Ag ₃ AsS ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Pyrite	FeS ₂	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Pyrolusite	MnO ₂	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Pyromorphite	Pb ₅ (PO ₄) ₃ Cl	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Pyrope Garnet (Red)	Mg ₃ Al ₂ (SiO ₄) ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Pyrrhotite	Fe(1-x)S (x 0 to 0.2)	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Quartz	SiO ₂	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Realgar	As ₄ S ₄	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Rhodocrosite	MnCaMgO	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Rhodonite	MnSiO ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Rutile	TiO ₂	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Sanidine	(K,Na)(Si,Al) ₄ O ₈	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Scheelite	CaWO ₄	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Serpentine	Mg ₆ (OH) ₈ (Si ₄ O ₁₀)	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Siderite	Fe ₂ CO ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Skutterudite	(Co,Ni)As ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Smithsonite	ZnCO ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Sodalite (Pyrope Garnet)	Na ₈ Al ₆ Si ₆ O ₂₄ Cl ₂	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Spessartine	Mn ₃ Al ₂ (SiO ₄) ₃	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>

Sphalerite	(Zn,Fe)S	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Sphene (Titanite)	CaTi SiO5	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Spinel	MgAl2O4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Spodumene	LiAlSi2O6	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Stibnite	Sb2S3	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Stilpnomelane	K(Fe2,Mg,Fe3)8(Si,Al)12(O,OH)2	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Strontianite	SrCO3	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Sturmanite	Ca6(Fe,Al,Mn)2(SO4)2B(OH)4(OH)12.25(H2O)	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Talc	Mg3Si4O10(OH)2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thorite	ThSiO4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tremolite	Ca2Mg5(Si8O22)(OH)2	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Tugtupite	Na4AlBe(Si4O12)Cl	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Valentinite	Sb2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Vanadinite	Pb5Cl(VO4)3	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Vermiculite	(MgFe,Al)3(Al,Si)4O10(OH)2.4H2O	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Willemite	Zn2SiO4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Witherite	BaCO3	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Wollastonite	CaSiO3	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Xenotime	YPO4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Yttrium Aluminium Garnet YAG	Y3Al5O12	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Zircon	ZrSiO4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input checked="" type="checkbox"/>

Rare Earths

Name	Formula	Suitability
Allanite	(Ce,Ca,Y,La) ₂ (Al,Fe ₃) ₃ (SiO ₄) ₃ (OH)	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Bastnasite	(Ce,La,Y)CO ₃ F	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerium (III) Fluoride	CeF ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerium (IV) Oxide	CeO ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerium Alumate	CeAl ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Cerium REE-glass (12%)	Ce	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Dysprosium Fluoride	DyF ₃	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Dysprosium REE-glass (12%)	Dy	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Dysprosium Silicide	DySi ₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Erbium Fluoride	ErF ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Erbium Oxide	Er ₂ O ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Erbium REE-glass (12%)	Er	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Europium (III) Oxide	Eu ₂ O ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Europium Fluoride	EuF ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Gadolinium (III) Oxide	Gd ₂ O ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Gadolinium Fluoride	GdF ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Gadolinium Gallium Garnet	Gd ₃ Ga ₅ O ₁₂	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Gadolinium REE-glass (12%)	Gd	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Holmium Fluoride	HoF ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Holmium Oxide	Ho ₂ O ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Holmium REE-glass (12%)	Ho	wdx <input checked="" type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Lanthanum (III) Oxide	La ₂ O ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>
Lanthanum Fluoride	LaF ₃	wdx <input type="checkbox"/> edx <input checked="" type="checkbox"/> thin film <input checked="" type="checkbox"/> thin foil <input type="checkbox"/> xrf <input type="checkbox"/>

Lanthanum REE Glass (12%)	La	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lutetium Fluoride	LuF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lutetium Oxide	Lu2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lutetium REE-glass (12%)	Lu	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Lutetium Silicide	LuSi2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Monazite	(Ce,La,Th,Nd,Y)PO4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Multi Element REE-glass (4% each) Y, Pr, Dy, Er		wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Multi Element REE-glass (4% each) Nd, Tb, Lu		wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Multi Element REE-glass (4% each) La, Sm, Gd, Yb		wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Multi Element REE-glass (4% each) Ce, Eu, Ho, Tm		wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Neodymium Fluoride	NdF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Neodymium Oxide	Nd2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Neodymium REE-glass (12%)	Nd	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Praseodymium Fluoride	PrF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Praseodymium Oxide	Pr2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Praseodymium REE Glass (12%)	Pr	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Samarium Fluoride	SmF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Samarium Oxide	Sm2O3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Samarium REE-glass (12%)	Sm	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Terbium Fluoride	TbF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Terbium REE-glass (12%)	Tb	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Terbium Silicide	TbSi2	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thorite	ThSiO4	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thorium Oxide	ThO2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thorium REE-glass (5%)	Th	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thulium Fluoride	TmF3	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thulium REE-glass (12)	Tm	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Thulium Silicide	TmSi2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input checked="" type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Uranium Oxide	UO2	wdx <input type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>
Uranium REE-glass (4%)	U	wdx <input checked="" type="checkbox"/>	edx <input checked="" type="checkbox"/>	thin film <input type="checkbox"/>	thin foil <input type="checkbox"/>	xrf <input type="checkbox"/>

Ytterbium Fluoride

YbF₃

wdx edx thin film thin foil xrf

Ytterbium REE-glass (12%)

Yb

wdx edx thin film thin foil xrf

Steels and Alloys

Aluminium Base

54XG231H4	Aluminium Alloy	Al, Si	MBH
55XG26H5	Aluminium Alloy	Al,Si,Cu	MBH
55XGO4H60	Aluminium Alloy	Al,Si,Cu	MBH
55XGO4H80	Aluminium Alloy	Al,Si,Cu	MBH
58XG40H9	Aluminium Alloy	Al, Zn	MBH
59XG77J1	Aluminium Alloy (cast)	Al, Zn, Mg, Cu	MBH
A1-5042-M	Aluminium Alloy	Aluminium/Silicon (50/50)	Testbourne
AL427915	Aluminium Alloy	Aluminium Matrix	GOODFELLOW
AL-50026-A	Aluminium Alloy	AA6061	TESTBOURNE
AL-50027-A	Aluminium Alloy	AA7075	TESTBOURNE
Aluminium Magnesium Silicon	Aluminium Alloy		Goodfellow
C 55X GO2D60	Aluminium Alloy	Al, Si, Cu	MBH
Dural	Al, Cu, Mg		

Bronze Base

CU055170/2	Phosphor Bronze		GOODFELLOW
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Cobalt Base

111X12670	Cobalt Alloy (Cast)	Cobalt /Tungsten (W 10)	MBH
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Copper Base

31X 7835.3	Leaded Brass		MBH
31X B2	Duplex Brass	phases of α/β Brass, 0.1(Z).	MBH

31X NB2	Naval Brass		MBH
31XWSB1	Silicon Brass		MBH
37MBS314B	Copper Alloy	CDA 314	MBH
37MBS360A	Copper Alloy	CDA 360	MBH
37MBS630	Copper Alloy	CDA 630	MBH
B.C.S. No 179/2	Copper Alloy (Cast)	High Tensile	BAS
C31XB40	Brass		MBH
C31XB60	Brass		MBH
C31XB80	Brass		MBH
CW147910	Leaded Brass		GOODFELLOW
IPT 10A Bronze Ref 0683	Bronze	IPT 10A	MBH
SRM 1276a	Copper Alloy	CDA 715	NIST
SRM 478	Cartridge Brass		NIST
SRM 872	Phosphor Bronze	CDA 544	NIST

Gold Base

SRM 481	Gold/ Silver Wires	Set of 6	NIST
SRM 482	Gold/Copper Wires	Set of 6	NIST

Iron Base

11X0331.2	Corrosion Resistant Cast Iron (Chill Cast)		MBH
11XS/1-CR1	Corrosion Resistant Cast Iron (Chill Cast)	Ni Resist	MBH
13MBS186A	Invar 36 Alloy		MBH
13MBS89E	Martensitic Stainless Steel	AISI 410	MBH
13MBS91E	Ferritic Stainless Steel	AISI 430	MBH
13X 12537	Austenitic Stainless Steel		MBH
13X NSC3	Nitrogen Stainless Steel (Chill Cast)	1.5 Carbon	MBH
13x18001	Austenitic Stainless Steel		MBH

14HYT2/2	Silicon Steel	Dynamo &Transformer Testing	MBH
14MB.S 190	High Manganese Stainless Steel	Nitronic 40	MBH
14X MSFM2	Resulfurised Steel (Chill Cast)		MBH
14XHS1	High Speed Tool Steel	AISI T-1	MBH
1748	Carbon Steel	0.5 Carbon	MBH
281-1	Austenitic Stainless Steel		BAS
481-1	Nodular Iron (Cast)		BAS
5/46 Ductile (Nodular) Iron	Ductile (Nodular) Iron	SUS 5/46	BAS
A 11-19	Low Alloy Steel	A 11-19	RIFM
AISI 304L	Austenitic Stainless Steel	AISI 304L	ADVENT
B.S. 57F	Carbon Steel	0.2 Carbon	MBH
BCS No. 238/2	Carbon Steel	0.2 Carbon	BAS
BCS No. 318B	Oxygen Steel	0.01 Oxygen	BAS
BCS/SS CRM No 410/ 2	Low Alloy Steel		BAS
BCS/SS CRM No 432/2	Carbon Steel	Plain Carbon	BAS
BCS/SS CRM No 456/2	Carbon Steel		BAS
BCS/SS CRM No. 469	Ferritic Stainless Steel		BAS
BCS/SS-CRM No. 470	Ferritic Stainless Steel		BAS
BS 0022	Martensitic Stainless Steel	AISI 410 (mod)	MBH
BS 153	Ferritic Stainless Steel	AISI 430F	BSC
BS 154	Ferritic Stainless Steel	AISI 430FR	BSC
BS 2992	Alloy Steel	AISI 8620	BSC
CRM 12 D 180B	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 181A	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 182A	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 183A	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 184A	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 185A	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 186B	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 187B	Low Alloy Steel	Set of 10 Steels (part of)	MBH

CRM 12 D 188A	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 12 D 189A	Low Alloy Steel	Set of 10 Steels (part of)	MBH
CRM 472	Ferritic Stainless Steel		
CRM No. 056-2	Carbon Steel	0.8 Carbon	BAS
ECRM No. 271-1	Tool Steel 1.2344	ASTM H13	BAS
EN58J	Austenitic Stainless Steel	AISI 316 Trace elements equal upto 0.5	ADVENT
Euronorm - MRC 176-2	Low alloy Steel		BAS
Euronorm CRM No 090-1	Carbon Steel	1% Carbon	BAS
Euronorm CRM No. 097-1	High Purity Iron		BAS
Euronorm CRM No. 287-1	High Boron Stainless Steel		BAS
Euronorm CRM No. 295-1	High Alloy Steel		BAS
Euronorm CRM No. 587-1	Boron Steel	Ferro-Boron	BAS
FCr-3-1	Iron Alloy		MBH
IARM 13C	Martensitic Stainless Steel	AISI 440C	ARMI
IARM 152B	Precipitation Hardening Stainless Steel	17-7 PH	MBH
IARM 157B	Austenitic Stainless Steel	Incoloy alloy / AL-6XN	ARMI
IARM 1D	Austenitic Stainless Steel	AISI 303	MBH
IARM 234B	Austenitic Stainless Steel	AISI 302HQ	MBH
IARM 255A	Tool Steel	AISI H-11	MBH
IARM 289A	Austenitic Stainless Steel	AISI 301	MBH
IARM 2G	Austenitic Stainless Steel	AISI 304	MBH
IARM 41C	Tool Steel	AISI D2	MBH
IARM 48B	Tool Steel	AISI T-1	ARMI
IARM 98B	Kovar		MBH
S.S. CRM No. 464/1	Austenitic Stainless Steel		BAS
S.S.- CRM No. 474	Austenitic Stainless Steel	AISI 317	BAS
S.S. No. 461	Austenitic Stainless Steel		BAS
S.S. No. 464	Austenitic Stainless Steel		BAS
S.S. No. 465	Austenitic Stainless Steel		BAS

S.S. No. 466	Austenitic Stainless Steel		BAS
S.S. No. 495/1	Manganese Steel	13% Manganese	BAS
S.S. No. 62	Austenitic Stainless Steel		BAS
S.S. No. 63	Austenitic Stainless Steel		BAS
S.S. No. 72	Ferritic Stainless Steel		BAS
SRM 101g	Austenitic Stainless Steel	AISI 304L	NIST
SRM 106B	Austenitic Stainless Steel	AISI 316	NIST
SRM 1134	High Silicon Steel		NIST
SRM 121d	Austenitic Stainless Steel	AISI 321	NIST
SRM 1225	Low Alloy Steel	AISI 4130	NIST
SRM 1227	Carbon Steel	1% Carbon	NIST
SRM 132b	Tool Steel	AISI M2	NIST
SRM 13g	Carbon Steel	0.6 Carbon	NIST
SRM 155	Chromium-Tungsten Steel		NIST
SRM 160b		AISI 316	
SRM 166c	Austenitic Stainless Steel	AISI 316L/Certified low carbon value only	NIST
SRM 1767	Low Alloy Steel		NIST
SRM 179	High Silicon Steel		NIST
SRM 343a	Martensitic Stainless Steel	AISI 431	NIST
SRM 348a	High Tempered Alloy	A286	NIST
SRM 361	Alloy Steel	AISI4340	NIST
SRM 362	Alloy Steel	AISI 94B17 (mod)	NIST
SRM 661	Alloy Steel	AISI 4340	NIST
SRM 663			
SRM 665	Electrolytic Iron		NIST
SRM C1287	High Alloy Steel	AISI 310 (mod)	NIST
SRM C2400	High Alloy Steel	ACT117/4PH	NIST
SRM C2401	High Alloy Steel		NIST
SS CRM No. 487/1	High Speed Tool Steel		BAS

Lead Base

81XPA12.5	Binary Alloy	Sb 16.	MBH
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Magnesium Base

65X MGA20	Magnesium Alloy	Mg,Al, Zn	MBH
65X MGB3	Magnesium Alloy	Mg,Al, Zn	MBH
65XMGA1	Magnesium Alloy	Mg, Al, Zn	MBH
65XMGA3	Magnesium Alloy	Mg, Al, Zn	MBH
65XMGA5	Magnesium Alloy	Mg, Al, Zn	MBH
Magnesium Alloy	Magnesium Alloy	Mg,Al,Mn,Zn	Advent
Magnesium Tin Alloy	Binary Alloy	Mg2Sn	

Molybdenum Base

Molybdenum- Hafnium	Binary Alloy	Hf 1	TESTBOURNE
Molybdenum- Titanium	Binary Alloy	Ti 1	TESTBOURNE

Nickel Base

210X11775	Nickel Alloy (Cast)		MBH
211X 11222	Nickel Alloy	Inconel 713	MBH
212NN50.01	Nickel Alloy		MBH
221X HF3	Nickel/Boron Hardfacing Alloy (Cast)		MBH
24X WASP3	Nickel Alloy	Waspalloy	MBH
27X 14386	Nickel Alloy		MBH
BCS/SS CRM No. 350	Nickel Alloy	Inconel 713	BAS
BCS/SS CRM No. 351	Nickel Alloy	Inconel 718	BAS
BCS/SS CRM No. 363/1	Nickel Alloy	Monel 400	BAS
BS 199A	Nickel Alloy	Waspalloy	BAS
BS 718B	Nickel Alloy	Inconel 718	BSC
C22x7550	Nickel Alloy	Nimonic Type	MBH
Nickel Aluminium	Binary Alloy	Ni/Al	Goodfellows

Nickel Aluminium	Binary Alloy	Ni/Al	Testbourne
SRM 1160	Nickel Alloy	Electronic and Magnetic alloy	NIST
Waspaloy			

Other Base			
204JC	Fluorspar		MBH
206ABL5	Uranium Ore BL-5		EMRC
B.C.S. - CRM No. 355	Tin Ore		BAS
SRM 1411	Soft Borosilicate Glass		NIST
SRM 1872	Lead-Germanate (set of 3)	K-453, K-491, K-968	NIST
SRM 2780	Hard Rock Mine Waste		NIST
SRM 710	Soda Lime Silica Glass		NIST

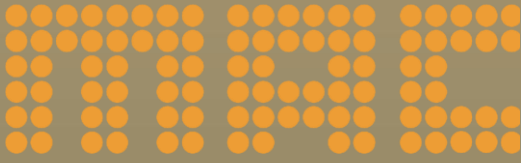
Palladium Base			
Palladium/ Nickel alloy	Binary Alloy	Ni 15	GOODFELLOW

Tin Base			
T7-5019-M	Binary Alloy	Pb 37	TESTBOURNE
T7-5020-M	Binary Alloy	Pb 3	TESTBOURNE

Titanium Base			
BCS- CRM No. 357	Titanium Alloy		BAS
BS T-5A	Titanium Alloy	Ti-6Al-4V	MBH
C101p 6790	Titanium Alloy		MBH

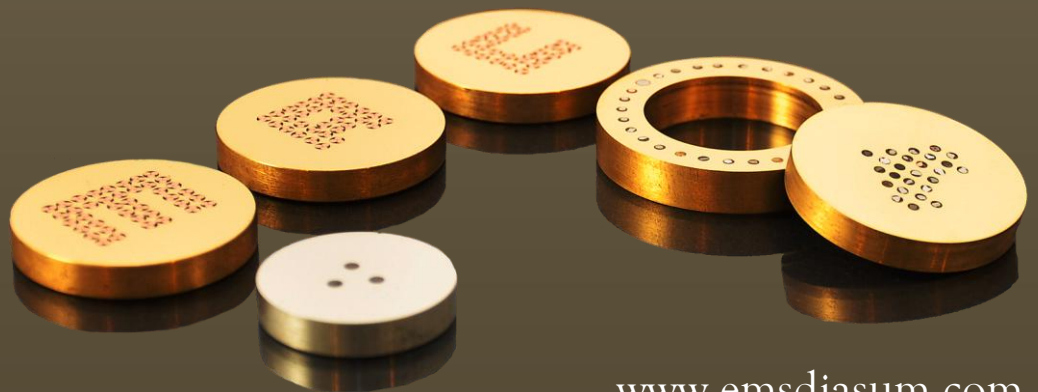
Tungsten Base			
SRM 480	Binary Alloy	Mo 20%	NIST
Tungsten- Rhenium	Binary Alloy	Re 5	TESTBOURNE
Tungsten- Tantalum	Binary Alloy	Ta 5	TESTBOURNE

Zinc Base			
42X Z7	Zinc Alloy (Cast)	Galfan Type	MBH
43X Z12	Zinc Alloy (cast)	Zn, Al, Cu	MBH
43X Z2	Zinc Alloy (Cast)	Zn, Al, Cu	MBH



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