

Titanium Oxysulfate Dihydrate	Pricing >
Titanium(IV) Oxysulfate	Pricing >
Titanium(IV) Oxysulfate Solution	Pricing >
Linear Formula	TiOSO ₄ · aq
Pubchem CID	16211270
MDL Number	MFCD00149873
EC No.	N/A
IUPAC Name	N/A
Beilstein/Reaxys No.	N/A
SMILES	N/A
Inchl Identifier	N/A
Inchl Key	N/A
Signal Word	Danger
Hazard Statements	H314
Hazard Codes	C
Risk Codes	35
Safety Statements	26-36/37/39-45
RTECS Number	N/A
Transport Information	UN 3264 8/PG 2
WGK Germany	2

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SAFETY DATA SHEET

Date Accessed: 04/24/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #13825-74-6

Relevant identified uses of the substance:
Scientific research and development

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals (Category 1), H290

Skin corrosion (Category 1A), H314

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictogram



Signal word: Danger

Hazard statement(s)

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P234

Keep only in original container.

P264

Wash skin thoroughly after handling.

P280

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

P301 + P330 + P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 + P310

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P363

Wash contaminated clothing before reuse.

P390

Absorb spillage to prevent material damage.

P405

Store locked up.

P406

Store in corrosive resistant stainless steel container with a resistant inner liner.

P501

Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: O5STi

Molecular weight: 159.93 g/mol

CAS-No.: 13825-74-6

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical

or carbon dioxide.
Special hazards arising from the substance or mixture
Sulphur oxides, Titanium/titanium oxides
Advice for firefighters
Wear self-contained breathing apparatus for
firefighting if necessary.
Further information
No data available

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and
emergency procedures
Wear respiratory protection. Avoid breathing vapors,
mist or gas. Ensure adequate ventilation. Evacuate
personnel to safe areas.
For personal protection see section 8.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning
up
Soak up with inert absorbent material and dispose of
as hazardous waste. Keep in suitable, closed
containers for disposal.
Reference to other sections
For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapor or mist.
For precautions see section 2.2.
Conditions for safe storage, including any
incompatibilities
Keep container tightly closed in a dry and well-
ventilated place.
Containers which are opened must be carefully
resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non-combustible,
corrosive hazardous materials
Specific end use(s)
Apart from the uses mentioned in section 1.2 no other
specific uses are stipulated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls
Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Form: clear, liquid

Colour: colourless

Odor

No data available

Odor Threshold

No data available

pH

No data available

Melting point/freezing point

No data available

Initial boiling point and boiling range

100 °C (212 °F) at 1,013 hPa (760 mmHg)

Flash point

No data available
Evaporation rate
No data available
Flammability (solid, gas)
No data available
Upper/lower flammability or explosive limits
No data available
Vapor pressure
No data available
Vapor density
No data available
Relative density
1.361 g/cm³
Water solubility
No data available
Partition coefficient: n-octanol/water
No data available
Auto-ignition temperature
No data available
Decomposition temperature
No data available
Viscosity
No data available
Explosive properties
No data available
Oxidizing properties
No data available
Other safety information
No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity
No data available
Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Conditions to avoid
No data available
Incompatible materials
No data available
Hazardous decomposition products
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity

Dermal:

No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS:

Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence
(Sulfuric acid)

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability:

No data available
Bioaccumulative potential:
No data available
Mobility in soil:
No data available
Results of PBT and vPvB assessment:
PBT/vPvB assessment not available as chemical
safety assessment not required/not conducted
Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a
licensed disposal company.
Contact a licensed professional waste disposal
service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US)
UN number: 3264
Class: 8
Packing group: II
Proper shipping name:
Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid,
Titanium oxide sulphate)
Reportable Quantity
(RQ): 294 lbs
Poison Inhalation Hazard: No
IMDG
UN number: 3264
Class: 8
Packing group: II
EMS-No: F-A, S-B
Proper shipping name:
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Sulfuric acid, Titanium oxide sulphate)
IATA
UN number: 3264
Class: 8
Packing group: II
Proper shipping name:
Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid,
Titanium oxide sulphate)

SECTION 15. REGULATORY INFORMATION

SARA 302

Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

Sulfuric acid

CAS-No. 7664-93-9

Revision Date 2007-07-01

SARA 313

Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Sulfuric acid

CAS-No. 7664-93-9

Revision Date 2007-07-01

SARA 311/312

Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know

Components

Sulfuric acid

CAS-No. 7664-93-9

Revision Date 2007-07-01

Pennsylvania Right To Know

Components

Water CAS-No. 7732-18-5

Revision Date 2007-07-01

Sulfuric acid 7664-93-9

Titanium oxide sulphate

13825-74-6

1994-07-31

New Jersey Right To Know

Components

Water CAS-No. 7732-18-5

Revision Date 2007-07-01

Sulfuric acid 7664-93-9

Titanium oxide sulphate 13825-74-6

1994-07-31

California Prop. 65

Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Sulfuric acid

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all

inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.
