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---ISO 9001: 2015----

MATERIAL SAFETY DATA SHEET

1.Identification 1.1GHS Product identifier Cupric oxalate

Code C 2690

2.Hazard identification

2.1Classification of the substance or mixture

Acute toxicity - Oral, Category 4
Acute toxicity - Dermal, Category 4

2.2GHS label elements, including precautionary statements

Pictogram(s)

Signal word

Hazard statement(s) Precautionary statement(s)

Prevention

Response

Warning

H302+H312 Harmful if swallowed or in contact with skin

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/\u2026if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/.

P312 Call a POISON CENTER/doctor/\u2026if you feel unwell.

P321 Specific treatment (see ... on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

none

Storage P501 Dispose of contents/container to ...

2.3Other hazards which do not result in classification

3. Composition/information on ingredients

3 1Substances

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Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Oxalic acid copper(2+) salt (1:1)	Oxalic acid copper(2+) salt (1:1)	814-91-5	none	100%

- 4.First-aid measures
- 4.1Description of necessary first-aid measures

General advice

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

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

In case of skin contact

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.

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2Most important symptoms/effects, acute and delayed

Inhalation causes irritation of nose and throat. Ingestion of very large amounts may produce symptoms of oxalate poisoning; watch

for edema of the glottis and delayed constriction of esophagus. Contact with eyes causes irritation. (USCG, 1999)

4.3Indication of immediate medical attention and special treatment needed, if necessary

no data available

5. Fire-fighting measures

5.1Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2Specific hazards arising from the chemical

Special Hazards of Combustion Products: Toxic carbon monoxide gas may form in fire. (USCG, 1999)

5.3Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures

6.1Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and storage

7.1Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2Conditions for safe storage, including any incompatibilities

... MATERIALS WHICH ARE TOXIC AS STORED OR WHICH CAN DECOMP INTO TOXIC COMPONENTS ... SHOULD BE STORED IN A COOL, WELL-VENTILATED PLACE, OUT OF DIRECT RAYS OF THE SUN, AWAY FROM AREAS OF HIGH FIRE HAZARD, & SHOULD BE PERIODICALLY INSPECTED ... INCOMPATIBLE MATERIALS SHOULD BE ISOLATED FROM EACH OTHER. /OXALATES/

8.Exposure controls/personal protection

8.1Control parameters

Occupational Exposure limit values

Recommended Exposure Limit: 10 Hr Time-Weighted Avg: 1 mg/cu m. /Copper (dusts and mists)/

Biological limit values

no data available

8.2Appropriate engineering controls

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

8.3Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities

Thermal hazards no data available

9. Physical and chemical properties

Physical state odorless bluish-white solid Colour Blue-white powder Odour no data available Melting point/ freezing point no data available

Boiling point or initial boiling point and boiling 365.1\u00baC at 760 mmHg

range

Flammability no data available Lower and upper explosion limit / flammability no data available

limit

Flash point 188.8\u00baC
Auto-ignition temperature no data available
Decomposition temperature no data available
pH no data available
Kinematic viscosity no data available

Solubility Practically insol in water, alc, ether, acetic acid; sol in ammonium hydroxide

Partition coefficient n-octanol/water (log value) no data available Vapour pressure no data available

Density and/or relative density greater than 1 at 20\u00b0C (USCG, 1999)

Relative vapour density no data available Particle characteristics no data available

10.Stability and reactivity

10.1Reactivity

no data available

10.2Chemical stability

Stable under recommended storage conditions.

10.3Possibility of hazardous reactions

CUPRIC OXÁLATE dissolves in aqueous ammonia and reacts as an acid to neutralize other bases as well. Can serve as a reducing agent in reactions that generate carbon dioxide.

10.4Conditions to avoid

no data available

10.5Incompatible materials

no data available

10.6Hazardous decomposition products

Dangerous; when heated to decomposition they emit toxic and irritating fumes. /Oxalates/

11.Toxicological information

Acute toxicity
Oral: no data available Inhalation: no data available Dermal: no data available Skin corrosion/irritation no data available Serious eye damage/irritation no data available Respiratory or skin sensitization no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available

STOT-single exposure no data available

STOT-repeated exposure

no data available Aspiration hazard no data available

12. Ecological information

12.1Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2Persistence and degradability

no data available

12.3Bioaccumulative potential

no data available

12.4Mobility in soil

no data available

12.50ther adverse effects

no data available

13.Disposal considerations

13.1Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

IMDG: UN2449

IATA: UN2449

14. Transport information 14.1UN Number ADR/RID: UN2449 14.2UN Proper Shipping Name

ADR/RID: unknown

IMDG: unknown

IATA: unknown

14.3Transport hazard class(es) ADR/RID: 6.1(b) IMDG: 6.1(b) IATA: 6.1(b)

14.4Packing group, if applicable

ADR/RID: III IMDG: III IATA: III

14.5Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6Special precautions for user

no data available

14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15.Regulatory information

15.1Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Oxalic acid copper(2+) salt (1:1)	Oxalic acid copper(2+) salt (1:1)	814-91-5	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015		73.6	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)		The state of the s	Not Listed.
Philippines Inventory of Chemicals and Chemical	Substances (PICCS)		Listed.
Vietnam National Chemical Inventory		6	Not Listed.
Chinese Chemical Inventory of Existing Chemical	Substances (China IECSC)	H A STORY	Listed.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.