



Material Safety Data Sheet

Catalog Number: 218278
Revision date: 25-Apr-2006

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 218278

Product name: SELENIUM OXYCHLORIDE

Supplier:

MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
SELENIUM OXYCHLORIDE	7791-23-3	90 - 100%	0.2 mg/m ³ TWA	0.2 mg/m ³ TWA

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Toxic: danger of very serious irreversible effects if swallowed. May also have serious irreversible effects through skin contact or inhalation.

Category of Danger:

Toxic , Carc. cat. 3

Principle routes of exposure: Skin

Inhalation: Harmful: possible risk of irreversible effects through inhalation.

Ingestion: Toxic: danger of very serious irreversible effects if swallowed.

Skin contact: Harmful: danger of serious damage to health by prolonged skin contact.

Eye contact: Risk of serious damage to eyes

Statements of hazard Toxic if swallowed

Statement of Spill or Leak - ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

Precautions - ANSI Label Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not breathe vapors or spray mist

4. FIRST AID MEASURES

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

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water and seek medical advice

Ingestion: Drink 1 or 2 glasses of water. Induce vomiting if person is conscious.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Use dry chemical, CO ₂ , water spray or "alcohol" foam
Specific hazards:	Burning produces irritant fumes.
Unusual hazards:	None known
Special protective equipment for firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
Specific methods:	Water mist may be used to cool closed containers.
Flash point:	Not determined
Autoignition temperature:	Not determined
NFPA rating:	
NFPA Health:	4
NFPA Flammability:	0
NFPA Reactivity:	0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment.
Environmental precautions:	Prevent product from entering drains.
Methods for cleaning up:	Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Storage:	
ROOM TEMPERATURE	
Handling:	Use only in area provided with appropriate exhaust ventilation.
Safe handling advice:	Wear personal protective equipment. Remove and wash contaminated clothing before reuse.
Technical measures/storage conditions:	Keep container tightly closed in a dry and well-ventilated place.
Incompatible products:	Oxidising and spontaneously flammable products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Impervious clothing Long sleeved clothing

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Formula:	Se
Catalog Number: 218278	Product name: SELENIUM OXYCHLORIDE

Molecular weight:	78.96
Melting point/range:	217 deg. C
Boiling point/range:	684 +/- 1 deg. C
Density:	No data available
Vapor pressure:	> 0.001 mm Hg at 20 °C
Evaporation rate:	No data available
Vapor density:	No data available
Solubility (in water):	No data available
Flash point:	Not determined
Autoignition temperature:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	None under normal processing.
Hazardous decomposition products:	Selenium (Se)
Materials to avoid:	Acids Strong oxidising agents
Conditions to avoid:	Exposure to air or moisture over prolonged periods.

11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity

Components

SELENIUM OXYCHLORIDE

RTECS Number:

VS7000000

Selected LD50s and LC50s

Oral LD50 Rat : 6700 mg/kg

Chronic toxicity:

Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

Local effects:

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Specific effects:

May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.

Primary irritation:

No data is available on the product itself.

Carcinogenic effects:

Possible carcinogen

Mutagenic effects:

No data is available on the product itself.

Reproductive toxicity:

No data is available on the product itself.

Components

SELENIUM OXYCHLORIDE

NIOSH - Health Effects

Eye, upper respiratory, and skin irritation; damage to the liver, kidney, spleen, and heart in animals

NIOSH - Target Organs

respiratory system, eyes, skin, spleen, liver, kidneys, blood

12. ECOLOGICAL INFORMATION

Mobility:

No data available

Bioaccumulation:

No data available

Ecotoxicity effects:

No data available

Aquatic toxicity:

May cause long-term adverse effects in the aquatic environment.

Components

SELENIUM OXYCHLORIDE

U.S. DOT - Appendix B - Marine Pollutant

Not Listed

U.S. DOT - Appendix B - Severe Marine Pollutants

Not Listed

United Kingdom - The Red List:

Not Listed

Components	Germany VCI (WGK)	World Health Organization (WHO) - Drinking Water	Ecotoxicity - Fish Species Data
SELENIUM OXYCHLORIDE	Not Listed	0.01 mg/L	Not Listed
Components	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Microtox Data	Ecotoxicity - Water Flea Data
SELENIUM OXYCHLORIDE	Not Listed	Not Listed	Not Listed
Components	EPA - ATSDR Priority List	EPA - HPV Challenge Program Chemical List	California - Priority Toxic Pollutants
SELENIUM OXYCHLORIDE	Rank (of 275): 143	Not Listed	Maximum concentration = reserved; continuous concentration = 5.0 ug/L
Components	California - Priority Toxic Pollutants	California - Priority Toxic Pollutants	
SELENIUM OXYCHLORIDE	No human health criteria is being promulgated for these contaminants. However, permit authorities should address these contaminants during the permit process.	Maximum concentration = 290 ug/L; continuous concentration = 71 ug/L	

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging:

Do not re-use empty containers

14. TRANSPORT INFORMATION

UN/Id No: 2879

DOT:

Proper shipping name: Selenium oxychloride
IATA Hazard Label(s): Corrosive & Toxic
Hazard Class: 8 - Corrosive materials
Subsidiary risk: 6.1 - Toxic
Packing group: I

Emergency Response Guide Number (ERG): 157

Components
 SELENIUM OXYCHLORIDE **U.S. DOT - Appendix A Table 1 - Reportable Quantities**
 RQ = 100 pounds (45.4 kg); The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

TDG (Canada):

WHMIS hazard class:

D2b toxic materials



IMDG/IMO

Proper shipping name:

Selenium oxychloride

IMDG - Hazard Classifications
 IMDG - Potential Marine Pollutants
 IMDG - Regulated Substances

IMDG class or division = 8, 6.1
 UN3283
 UN2879

Components

	U.S. DOT - Appendix B - Marine Pollutant	U.S. DOT - Appendix B - Severe Marine Pollutants
SELENIUM OXYCHLORIDE	Not Listed	Not Listed

IMO-labels:

15. REGULATORY INFORMATION

International Inventories

Components

SELENIUM OXYCHLORIDE

Inventory - United States TSCA - Sect. 8(b)

Present

Canada DSL Inventory List -

Present

Australia (AICS):

Present

Inventory - China:

Present

EU EINECS List -

231-957-4; Se

Korean KECL:

KE-30924

Philippines PICCS:

Present

U.S. regulations:

Components

SELENIUM OXYCHLORIDE	California Proposition 65 -	Massachusetts Right to Know List: [present]	New Jersey Right to Know List: sn 1648	Pennsylvania Right to Know List: environmental hazard (any compound of this substance is also an environmental hazard)
	Not Listed			

Components

SELENIUM OXYCHLORIDE	Florida substance List:	Rhode Island Right to Know List:	Illinois - Toxic Air Contaminants	Connecticut - Hazardous Air Pollutants
	[present]	Toxic	[present]	4 ug/m ³ HLV (as Se)

Components

SELENIUM OXYCHLORIDE	SARA 313 Emission reporting/Toxic Release of Chemicals	CERCLA/SARA - Section 302 Extremely Haz	NTP:	IARC:
	form R reporting required for 1.0% de minimis concentration	TPQ = 500 pounds; RQ = 500 pounds	None	None

SARA 313 Notification:

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification:

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

16. OTHER INFORMATION

Prepared by: Health & Safety

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End of Safety Data Sheet