



THREE EYES DEALS PVT LTD

123/124, Pancharatna, Char Rasta, G.I.D.C ,
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MATERIAL SAFETY DATA SHEET

SELENIUM DIOXIDE

SECTION 01 – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Selenium Dioxide

Chemical Formula: SeO₂

Synonyms : Selenium oxide (1:2); Selenous anhydride

Supplier Name: THREE EYES DEALS PVT LTD

123-124, 1st floor, Pancharatna Complex, GIDC, Char Rasta, Vapi – 396195

Emergency Phone: +91- 96 96 96 0250

SECTION 02 – COMPOSITION/ INFORMATION ON INGREDIENTS

Component	Concentration
7446-08-4	100 %

SECTION 03 – HAZARD IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Corrosive to eyes and skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

POTENTIAL CHRONIC HEALTH EFFECTS:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance may be toxic to blood, kidneys, liver, spleen, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

SECTION 04 – FIRST AID MEASURES

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

SECTION 05- FIRE FIGHTING MEASURES

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: When heated to decomposition it emits toxic fumes.

Special Remarks on Explosion Hazards: Not available

SECTION 06 – ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Corrosive solid. Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities..

SECTION 07 – HANDLING AND STORAGE

Precautions:

Keep container dry. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, organic materials, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

SECTION 08 – PERSONAL PROTECTION

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.2 (mg(Se)/m) from ACGIH (TLV) [United States] Inhalation Consult local authorities for acceptable exposure limits.

SECTION 09 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance:	Solid. (Lustrous solid. crystalline powder
Odor:	Sour.
Taste:	Acid.
Molecular Weight:	110.96 g/mole
Color:.	White or yellowish-white to slightly reddish
pH (1% soln/water):	Not available
Boiling Point:	Not available
Melting Point:	Sublimation temperature: 340°C (644°F)
Critical Temperature:.	No data available
Specific Gravity:	3.954 (Water = 1)
Vapor Pressure:	Not applicable.
Vapor Density:	No data available
Volatility:	Not available
Odor Threshold:.	Not available
Water/Oil Dist. Coeff.::	Not available.
Ionicity (in Water):	Not available
Dispersion Properties:	See solubility in water, methanol, acetone.
Solubility:	Soluble in cold water. Partially soluble in methanol, acetone

SECTION 10 – STABILITY AND REACTIVITY

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, dust generation

Incompatibility with various substances: Reactive with reducing agents, organic materials, acids.

Corrosivity: Not available.

Special Remarks on Reactivity: Incompatible with phosphorus trichloride, organic materials, reducing agents, alcohols, ammonia, nitric acid, and halogen acids.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 23.3 mg/kg [Mouse].

Chronic Effects on Humans: May cause damage to the following organs: blood, kidneys, liver, spleen, central nervous system (CNS).

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

May cause adverse reproductive effects. May affect genetic material (mutagenic)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes severe skin irritation, skin rash, and possible burns.

Eyes: Causes severe irritation and possible burns. Persons who work in atmospheres containing selenium dioxide dust may develop a condition known as "rose eye", a pink allergy of the eyelids, which often become puffy. It may also cause conjunctivitis of the palpebral conjunctiva, but rarely of bulbar conjunctiva. May cause corneal injury. Inhalation: Breathing in dust can irritate nose (with dryness, nosebleeds), throat, mucous membranes of eyes, nose and throat, lungs (cough, phlegm), sternal pain, and/ or shortness of breath. Higher exposure may cause build-up of fluid in the lungs (pulmonary edema). Acute exposure to fumes of Selenium oxide causes headache, nausea, vomiting, burning sensation in the nostrils with sneezing, dizziness, bronchospasm and severe dyspnea or breathing difficulties, followed by symptoms of fume metal fever characterized by flu-like symptoms with metallic taste, chest pain, weakness, fever, chills, increased white blood cell count, prolonged bronchitis, and pneumonitis. May cause spleen and liver damage. Ingestion: Harmful if swallowed. May cause severe gastrointestinal tract irritation with headache, nausea, vomiting, and possible burns. May affect the lungs (lung congestion), respiration (apnea), behavior/central nervous system (symptoms similar to inhalation), and cause liver and kidneys congestion or damage (somnolence, convulsions), respiration (apnea), asystole, diffuse swelling of the heart, and brain edema. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause sensitization (dermatitis). Long term exposure via inhalation may cause coated tongue, paleness, stomach disorders, nervousness, metallic taste and a garlic odor of the breath, and blood abnormalities. Ingestion: Prolonged or repeated ingestion may affect the blood (changes in red blood cell count, anemia, pigmented or nucleated red blood cells or other blood abnormalities), cause digestive tract disturbances, and kidney, liver, or spleen damage

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available. **Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 13 – WASTE DISPOSAL

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations

SECTION 14 – TRANSPORTATION INFORMATION

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Selenium Compound, n.o.s (Selenium Dioxide) UNNA: 3283 PG: III

Special Provisions for Transport: Not available.

SECTION 15 – REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16 – OTHER INFORMATION

The information presented here is believed to be accurate and pertains only to the product when stored in a sealed condition, as prescribed here. The information is given in good faith, but no warranty, express or implied, is made. Users should make their own investigations, for their specific applications and processes, to determine the suitability of the safety information mentioned here. Three Eyes Deals Pvt Ltd will in no way be liable for any claims, losses and / or damages of any third party, or for lost profits, or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, from the use of this product