



CHINATUNGSTEN

ONLINE MANU. & SALES CORP

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Violet Tungstic Oxide (VTO) MSDS

1. PRODUCT IDENTIFICATION

CHEMICAL NAME; CLASS: OMEGALAQ-1200G

2. COMPOSITION and INFORMATION ON INGREDIENTS

| CHEMICAL NAME Hazardous | CAS # | % | EXPOSURE LIMITS IN AIR | | | | | OTHER |
|---|------------|-------|------------------------|-------------|------------|-------------|-------------|-------|
| | | | ACGIH | | OSHA | | | |
| | | | TLV ppm | STEL ppm | PEL Ppm | STEL ppm | IDLH ppm | |
| Sodium Tungstate | 13472-45-2 | 15-20 | 1mg/cu. m | NA | NA | NA | NA | |
| Tungstic Oxide | 1314-35-8 | 0-5 | 5mg/cu. m(as w) | NA | NA | NA | NA | |
| n-propyl bromide | 106-94-5 | 65-70 | NE | NA | NE | NA | NA | |
| Toluene | 108-88-3 | 0-2 | 100ppm | NE | 100ppm | NE | NE | |
| Ensolv Patented Stabilizer Pacakage | NA | 0-3 | NA | NA | NA | NA | NA | NA |
| Non-Hazardous | | 5-20 | | | | | | |

NA = Not Available, NE= Not Established

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Vapors may be irritating to eyes, skin, and respiratory tract. Harmful if inhaled. Wear full protective equipment. Prevent contamination of soil surface, water or ground water. Solvent has no flash point, but vapors will form flammable mixture at a concentration of 4.6% to 8.5% by volume with air.

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE: The most significant route of over-exposure for this product is by contact with the skin.

INHALATION: In high concentrations produces irritation to upper respiratory tract, vapors can cause unconsciousness, headache, dizziness, nausea, vomiting or narcosis. Chronic overexposure at high levels may cause adverse effects in the liver, respiratory system, kidney, reproductive system, and central nervous system. Persons having pre-existing diseases of the lungs, eyes or skin may have an increased susceptibility to the hazards of excessive exposure.

CONTACT WITH THE SKIN AND EYES: May cause pain and slight eye irritation. Vapors may irritate eyes. Prolonged or repeated exposure may cause skin irritation. May cause drying or flaking of skin. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INGESTION: may result in irritation of mouth and gastro-intestinal tract.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms.

Persons having pre-existing diseases of the lungs, eyes or skin may have increased susceptibility to the hazards of excessive exposure.

4. FIRST-AID MEASURES

SKIN EXPOSURE: If this product contaminates the skin, begin flushing with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Contaminated individual must seek medical attention if redness or irritation continues after area has been rinsed.

EYE EXPOSURE: If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes.

INHALATION: Remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers. Call a physician and/or transport to emergency facility immediately.

4. FIRST-AID MEASURES (Continued)

INGESTION: Drink large amounts of water. Do not induce vomiting, Seek emergency medical attention.

Contaminated individual must be taken for medical attention if adverse effects occur. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to physician or other health professional with contaminated individual.

5. FIRE-FIGHTING MEASURES

FLASH POINT, (method): None (CC)

AUTOIGNITION TEMPERATURE: NA

FLAMMABLE LIMITS (in air by volume, %):

Lower (LFL): 4.6

Upper (UFL): 8.5

FIRE EXTINGUISHING MATERIALS:

Water fog: YES

Carbon Dioxide: YES

Foam: YES

Dry Chemical: YES

NFPA RATING

FLAMMABILITY

0

0

HEALTH

2

REACTIVITY

OTHER

UNUSUAL FIRE AND EXPLOSION HAZARDS: Avoid contact with flames, sparks or high intensity sources. Thermal decomposition may produce carbon monoxide, carbon dioxide, hydrogen halide and bromides.

SPECIAL FIRE-FIGHTING PROCEDURES: Keep people away. Isolate fire area and deny unnecessary entry. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Stay upwind. Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing. If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Clear all personnel from area. Do not breathe vapors. Ventilate area of leak or spill. Do not breathe vapors. Ventilate area of leak or spill. Wear protective equipment including positive pressure self contained or air supplied breathing apparatus.

Contain liquid, prevent contamination of soil, surface water or ground water. Solvent material is heavier than water and has limited water solubility. It will collect on the lowest surface.

Contain liquid, transfer to properly labeled closed containers. Place all spill in a suitable container and seal. Dispose of in accordance with Federal, State and local hazardous waste disposal regulations (see Section 13, Disposal Considerations).

7. HANDLING and USE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Do not eat or drink while handling chemicals.

7. HANDLING and USE (Continued)

STORAGE AND HANDLING PRACTICES: All employees who handle this material should be trained to handle it safely. Avoid breathing material of this product. Packages of this product must be properly labeled. Store packages in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Inspect all incoming packages before storage, to ensure they are properly labeled and not damaged.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Decontaminate equipment using soapy water before maintenance begins. Collect all rinsates and dispose of according to applicable Federal, State, or local procedures.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Prudent practice is to ensure eyewash/safety shower stations are available near where this product is used. Provide local exhaust ventilation to control airborne levels below the exposure guidelines.

RESPIRATORY PROTECTION: Use an approved air-purifying or positive-pressure supplied-air respirator depending on the potential concentration. Follow the requirements of the Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), or equivalent State standards.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Wear impervious gloves.

9. PHYSICAL and CHEMICAL PROPERTIES

RELATIVE VAPOR DENSITY (air = 1): NA.

Odor: Irritating odor at high concentration.

SPECIFIC GRAVITY (water = 1): NA

FREEZING/MELTING POINT: Not available.

SOLUBILITY IN WATER: NA

BOILING POINT: NA

VAPOR PRESSURE: NA

pH: NA.

COEFFICIENT WATER/OIL DISTRIBUTION: Not applicable.

APPEARANCE AND COLOR: liquid with solvent odor.

HOW TO DETECT THIS SUBSTANCE (warning properties): The appearance is a distinct property of this product.

10. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid open flames, direct sunlight or ultraviolet sources.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: The following toxicological data are available for the components of this product:

N-Propyl bromide LD50/Rat—oral --4260 mg/Kg
Lc50/Rat, inhalation—50,291ppm/30min;14,374/4hr

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce or eliminate exposure.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION

ENVIRONMENTAL STABILITY:

No information available

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: 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.

14. TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Product not regulated
HAZARD CLASS NUMBER and DESCRIPTION: NA.
UN IDENTIFICATION NUMBER: NA
PACKING GROUP: NA.
DOT LABEL(S) REQUIRED: NA.

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (1996): NA.
MARINE POLLUTANT: NA.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: NA

15. REGULATORY INFORMATION

SARA REPORTING REQUIREMENTS: This product is subject to the reporting requirements of Sections 311, 312 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows:

| COMPONENT | SARA 311 | SARA 312 | SARA 313 |
|-----------|----------|----------|----------|
| Toluene | NA | NA | yes |
| | | | |
| | | | |
| | | | |

SARA THRESHOLD PLANNING QUANTITY: NA.

TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.

CERCLA REPORTABLE QUANTITY (RQ): NA.

OTHER U.S. FEDERAL REGULATIONS: NA.

STATE REGULATORY INFORMATION: The components of this product are covered under specific State regulations, as denoted below:

Alaska - Designated Toxic and Hazardous Substances: NA.
California: contain chemical known to the state of California to cause cancer, birth defects or other reproductive harm.
Florida - Substance List: NA.
Illinois - Toxic Substance List: NA.
Kansas - Section 302/313 List: NA.

Massachusetts - Substance List: NA.
Minnesota - List of Hazardous Substances: NA.
Missouri - Employer Information/Toxic Substance List: NA.
New Jersey - Right to Know Hazardous Substance List: NA.
North Dakota - List of Hazardous Chemicals, Reportable Quantities: NA.

Pennsylvania - Hazardous Substance List: NA.
Rhode Island - Hazardous Substance List: NA.
Texas - Hazardous Substance List: NA.
West Virginia - Hazardous Substance List: NA.
Wisconsin - Toxic and Hazardous Substances: NA.

16. OTHER INFORMATION

CAUTION! MAY BE HARMFUL IF INGESTED. CONTACT WITH SKIN MAY CAUSE IRRITATION. Do not taste or swallow. Avoid contact with skin. Use with adequate ventilation. Wash thoroughly after handling. Wear gloves and safety goggles when using this product. **FIRST-AID:** In case of contact, immediately flush skin or eyes with large amounts of water. If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **IN CASE OF FIRE:** Use fog, foam, dry chemical or CO₂. **IN CASE OF SPILL:** Pick-up material and rinse area with soap and water. Refer to MSDS for additional information.

This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of OMEGA's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.