

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Tungsten Disulfide

Chemical Formula: WS₂

Manufacturer Item Number: TU-5530

Manufacturer: Lorad Chemical Corporation
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2. HAZARD IDENTIFICATION

Signal Word: Warning

Pictograms:



Hazard Statements: H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary Statements: P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection / face protection / protective gloves.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P304+340+312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+313 If skin irritation occurs: Get medical advice / attention.
P337+313 If eye irritation persists: Get medical advice / attention.
P362 Take off contaminated clothing and wash before reuse.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents / container to an approved waste disposal plant.

HMIS Health Ratings (0-4)

- Health: 2
- Flammability: 0
- Physical: 0

3. COMPOSITION

Additional Names: No Data Available.

Percentage: 100wt%
CAS #: 12138-09-9
EC #: 235-243-3

4. FIRST AID PROCEDURES

General Treatment Consult a physician. Show this SDS to the doctor in attendance. Move out of dangerous area.

Special Treatment: No Data Available.

Important Symptoms: See Section 2 and Section 11.

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

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

Skin: Wash off with soap and plenty of water. Consult a physician.

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

5. FIREFIGHTING MEASURES

Flammability: Not Flammable.

Special Hazards from Substance: No Data Available.

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

Special Fire Fighting Procedures: Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

If Material is Released / Spilled: Wear personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable closed containers for disposal.

Environmental Precautions: Do not let product enter drains, sewers, or watercourses.

7. HANDLING AND STORAGE

Handling Conditions: Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place.

Work / Hygienic Maintenance: Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink, or smoke when using this product.

Ventilation: Ensure adequate ventilation. Provide appropriate exhaust ventilation at places where dust is formed.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

| | |
|-------------------------------------|---|
| Permissible Exposure Limits: | NIOSH (TWA): 5 mg/m ³ NIOSH (ST): 10 mg/m ³ |
| Threshold Limit Value: | ACGIH (TWA): 5.0 mg/m ³ - Lower respiratory tract irritation varies ACGIH (STEL): 10.0 mg/m ³ - Lower respiratory tract irritation varies |
| Special Equipment: | No Data Available. |
| Respiratory Protection: | For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |
| Protective Gloves: | 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. |
| Eye Protection: | Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). |
| Body Protection: | Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace. |

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

| | |
|----------------------------------|-----------------------|
| Color: | Black |
| Forms: | Powder |
| Odor: | No Data Available. |
| Water Solubility: | No Data Available. |
| Boiling Point: | No Data Available. |
| Melting Point: | 1,250°C (2,282°F) |
| Flash Point: | No Data Available. |
| Autoignition Temperature: | No Data Available. |
| Density: | 7.5 g/cm ³ |
| Molecular Weight: | 247.97 g/mol |

10. REACTIVITY

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| Stability: | Stable under recommended storage conditions. |
| Reacts with: | Strong acids, strong oxidizing agents. |
| Incompatible Conditions: | No Data Available. |
| Hazardous Decomposition Products: | Hazardous decomposition products formed under fire conditions include Sulphur Oxides and Tungsten Oxide. |

11. TOXICOLOGICAL INFORMATION**Potential Health Effects:**

| | |
|--------------|--------------------|
| - Eyes | No Data Available. |
| - Skin | No Data Available. |
| - Ingestion | No Data Available. |
| - Inhalation | No Data Available. |
| - Chronic | No Data Available. |

Signs and Symptoms: No Data Available.

Aggravate Medical Conditions: No Data Available.

Median Lethal Dose: No Data Available.

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

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: No Data Available.

Persistence and degradability: No Data Available.

Bioaccumulative potential: No Data Available.

Notes: No Data Available.

13. DISPOSAL CONSIDERATIONS

Disposal: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose of unused product.

14. TRANSPORTATION DATA

Hazardous: DoT: Not Dangerous Goods
IMDG: Not Dangerous Goods
IATA: Not Dangerous Goods

Pictogram: N/A

Hazard Class: N/A

Packing Group: N/A

UN Number: N/A

Proper Shipping Name: N/A

15. REGULATORY INFORMATION

SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

| | |
|---|---|
| SARA 313 Components | This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313. |
| SARA 311/312 Hazards | Acute Health Hazard |
| Massachusetts Right to Know Components | No components are subject to the Ma. Right to Know Act. |
| Pennsylvania Right to Know Components | Tungsten Disulfide (CAS No. 12138-09-9) |
| New Jersey Right to Know Components | Tungsten Disulfide (CAS No. 12138-09-9) |
| California Prop. 65 Components | This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm. |

16. OTHER INFORMATION

Copyright 2018 Lorad Chemical Corporation. 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 does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. The information in this sheet does not represent a guarantee of the properties of the product. Lorad Chemical Corporation and its Affiliates make no warranty with respect to the accuracy of the information or the suitability of this product for any particular application, and shall not be held liable for any damage resulting from handling or from contact with the above product.

Revision Date: 01/15/2018