

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
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**MATERIAL SAFETY DATA SHEET (MSDS)****MOLYBDENUM TRIOXIDE LR****1. Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name : MOLYBDENUM TRIOXIDE LR

Product code : M0139100500

Identification of the product : Molybdenum trioxide  
CAS No: 1313-27-5  
EC No :215-204-7  
Annex No :042-001-00-9

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use : Industrial. For professional use only.

**1.3. Details of the supplier of the safety data sheet**

Company identification SUVCHEM  
Chaitanya Tower, 2nd Floor, Office # 206,  
Siddharth Nagar, S.V. Road,  
Goregaon (West), Mumbai - 400062,  
Maharashtra, India.  
Contact: +91 22 28725393 / 94 / 95  
Email ID: info@suvchem.com/care@suvchem.com

**1.4. Emergency telephone number**

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

**2. Hazards identification -DSD****2.1. Classification of the substance or mixture****Classification EC 67/548 or EC 1999/45**

Classification : Carc. Cat. 3; R40  
Xi; R36/37

**Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)**

Health hazards : Carcinogenicity - Category 2 - Warning (CLP : Carc. 2) H351  
Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -  
Category 3 - Warning (CLP : STOT SE 3) H335  
Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

**2.2. Label elements****Labelling EC 67/548 or EC 1999/45**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**MOLYBDENUM TRIOXIDE LR**
**2. Hazards identification -DSD (continued)**

Symbol(s)



Symbol(s)

: Xn : Harmful

R Phrase(s)

: R36/37 : Irritating to eyes and respiratory system.

R40 : Limited evidence of a carcinogenic effect.

S Phrase(s)

: S2 : Keep out of the reach of children.

S22 : Do not breathe dust.

S36/37 : Wear suitable protective clothing and gloves.

Contains

: Molybdenum trioxide

**Labelling Regulation EC 1272/2008 (CLP)**

Hazard pictograms



Signal words

: Warning

Hazard statements

: H351 : Suspected of causing cancer.

H319 : Causes serious eye irritation.

H335 : May cause respiratory irritation.

Precautionary statements

• General

: P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

P201: Obtain special instructions before use.

• Prevention

: P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

• Response

: P308+P313: If exposed or concerned : get medical advice.

P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

P337+P313: If eye irritation persists: Get medical advice/attention.

• Storage

: P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

• Disposal considerations

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Contains

: Molybdenum trioxide

**2.3. Other hazards**

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## MATERIAL SAFETY DATA SHEET (MSDS)

### MOLYBDENUM TRIOXIDE LR

#### 2. Hazards identification -DSD (continued)

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : Molybdenum trioxide

EC No :215-204-7  
 Annex No :042-001-00-9  
 Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Molybdenum trioxide	100 %	1313-27-5	215-204-7	042-001-00-9	----	Carc. Cat. 3; R40 Xi; R36/37
						Carc. 2 _ H351 Eye irrit 2 _ H319 STOT SE 3 _ H335

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

##### 4.1. Description of first aid measures

**Inhalation** : Call a POISON CENTER or doctor if you feel unwell. Remove to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

**Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists : Get medical advice.

**Ingestion** : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

##### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms relating to use** : Suspected of causing cancer.  
 Causes serious eye irritation. May cause respiratory irritation.

##### 4.3. Indication of any immediate medical attention and special treatment needed

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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**MOLYBDENUM TRIOXIDE LR**
**5. Fire-fighting measures (continued)**

- Unsuitable extinguishing media** : Do not use a heavy water stream.
- Surrounding fires** : Use water spray or fog for cooling exposed containers.

**5.2. Special hazards arising from the substance or mixture**

- Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

**5.3. Advice for fire-fighters**

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
- Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**6. Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**

- For emergency responders** : Equip cleanup crew with proper protection.  
Ventilate area.
- For non-emergency personnel** : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

- Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

**6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

**7. Handling and storage**
**7.1. Precautions for safe handling**

- Handling** : Obtain special instructions before use.  
Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
- Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

**MATERIAL SAFETY DATA SHEET (MSDS)**
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**7. Handling and storage (continued)**

**Special precautions** : Avoid breathing dust, fume, gas, mist, vapours, spray.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

**7.3. Specific end use(s)**

**Specific end use(s)** : None.

**8. Exposure controls/personal protection**
**8.1. Exposure controls**

**Personal protection** : Avoid all unnecessary exposure.

- **Respiratory protection** : Wear approved mask.
- **Hand protection** : Wear protective gloves.
- **Eye protection** : Chemical goggles or safety glasses.
- **Others** : When using, do not eat, drink or smoke.

**8.2. Control parameters**

**Occupational Exposure Limits** : No data available.

**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

**Physical state at 20 °C** : Solid.

**Colour** : Pale yellow to green

**Odour** : Odorless

**Odour threshold** : No data available.

**pH value** : No data available.

**Melting point [°C]** : 795 °C

**Decomposition point [°C]** : N/A

**Critical temperature [°C]** : N/A

**Auto-ignition temperature [°C]** : N/A

**Flammability (solid, gas)** : N/A

**Flash point [°C]** : N/A

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**9. Physical and chemical properties (continued)**

Boiling point [°C]	: 11500C
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm <sup>3</sup> ]	: 4,692
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: 0.107 g/100 g water
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm <sup>2</sup> /s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity	: Not established.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
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**10.5. Incompatible materials**

**MATERIAL SAFETY DATA SHEET (MSDS)**
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**10. Stability and reactivity (continued)**

**Materials to avoid** : Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** : Fumes. Carbon monoxide. Carbon dioxide.

**11. Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

- **Inhalation** : Based on available data, the classification criteria are not met.
- **Dermal** : Based on available data, the classification criteria are not met.
- **Ingestion** : Based on available data, the classification criteria are not met.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Causes serious eye irritation.  
May cause respiratory irritation.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Suspected of causing cancer.

**Toxic for reproduction** : Based on available data, the classification criteria are not met.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

**Aspiration hazard** : Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity**

**Toxicity information** : Not established.

**12.2. Persistence - degradability**

**Persistence - degradability** : Biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

**12.4. Mobility in soil**



**MATERIAL SAFETY DATA SHEET (MSDS)**
**MOLYBDENUM TRIOXIDE LR**
**12. Ecological information (continued)**

**Mobility in soil** : Not established.

**12.5. Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

**Proper shipping name** : TOXIC SOLID, INORGANIC, N.O.S.  
**UN N°** : 3288  
**H.I. nr** : 60  
**ADR - Class** : 6.1  
**Labelling - Transport** : 6.1 : Toxic substances.



**ADR - Classification code** : T5  
 T5  
 T5  
**ADR - Group** : III  
**ADR - Packing instructions** : P002 R001 LP002  
**ADR - Limited Quantity** : 5 KG  
**ADR - Tunnel code**





**MATERIAL SAFETY DATA SHEET (MSDS)**
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**14. Transport information (continued)**

: E : Passage forbidden through tunnels of category E.

**14.2. Sea transport (IMDG) [English only]**

Proper shipping name : TOXIC SOLID, INORGANIC, N.O.S.  
 UN N° : 3288  
 IMO-IMDG - Class or division : 6.1 : Toxic substances.  
 IMO-IMDG - Packing group : III  
 IMO-IMDG - Packing instructions : P002 LP02  
 IMO-IMDG - Limited quantities : 5 kg  
 IMO-IMDG - Marine pollution : No  
 EMS-Nr : F-A S-A

**14.3. Air transport (ICAO-IATA) [English only]**

Proper shipping name : TOXIC SOLID, INORGANIC, N.O.S.  
 UN N° : 3288  
 IATA - Class or division : 6.1 : Toxic substances.  
 IATA - Packing group : III  
 IATA - Passenger and Cargo Aircraft : ALLOWED  
   - Passenger and Cargo - Packing : 670  
 instruction  
   - Passenger and Cargo - Maximum : 100 kg  
 Quantity/Packing  
 IATA - Cargo only : ALLOWED  
   - Cargo only - Packing instruction : 677  
   - Cargo only - Maximum Quantity/ : 200 kg  
 Packing  
 IATA - Limited Quantities : 10 kg  
 ERG-Nr : 6L

**15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Safety, health and environmental : Ensure all national/local regulations are observed.  
 regulations/legislation specific for the substance or mixture  
 REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.  
 REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

**MATERIAL SAFETY DATA SHEET (MSDS)**

**MOLYBDENUM TRIOXIDE LR**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**