

# MACO CORPORATION INDIA PVT LTD



## MATERIAL SAFETY DATA SHEET

Revision Date: 31/10/2022

## MSDS

Print Date: 31/10/2022 Version: 1.0

### SECTION 1 - CHEMICAL PRODUCT AND IDENTIFICATION

Product Name: **Granulated HMnO slag**

Trade Name: **Maco Corporation India Pvt. Ltd.  
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Pin – 700020**

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### Section 2 - HAZARD IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification (EC 1272/2008) : Physical and chemical hazards: not classified.  
Human Health: not classified  
Environment: not classified

The full text for all R-Phrases and hazard statements are displayed in section 16.

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Material	Chemical Analysis (%)		Physical Analysis (%)				
	MnO	SiO <sub>2</sub>	+ 6mm	+ 3 mm	-3mm	-1mm	Bulk Density (approx.)
Granulated HMnO Slag	33.47	32.06	14.04	24.56	61.4	-	1.9 to 2.0

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Inhalation: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.  
 Ingestion: Rinse mouth thoroughly. Get medical attention if any discomfort continues.  
 Skin contact: Wash skin with soap and water. Get medical attention if irritation persists after washing.  
 Eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Rinse eye with water immediately. Get medical attention if any discomfort continues.

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

Inhalation: Dust may irritate the respiratory system.  
 Ingestion: No specific symptoms noted.  
 Skin contact: Prolonged exposure may cause skin irritation.  
 Eye contact: Dust may irritate the eyes.

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

Treat symptomatically

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## SECTION 5: Firefighting measures

- 5.1 Extinguishing media** This product is not flammable. Use fire extinguishing media appropriate for surrounding materials.
- 5.2 Special hazards arising from the substance or mixture**  
Hazardous combustion products: None under normal conditions
- 5.3 Advice for firefighters**  
Special fire-fighting procedures: No specific fire-fighting procedures given

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## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Follow precautions for safe handling described in this safety data sheet
- 6.2 Environmental precautions and delivered**  
The product should not be dumped in nature but collected  
  
According to agreement with the local authorities. Entry into watercourses should be avoided
- 6.3 Methods and material for containment and cleaning up**  
Avoid dust formation. Water spray to prevent airborne dust where possible. Avoid dry sweeping which creates dust if possible. Transfer to a container for disposal.
- 6.4 Reference to other sections**  
see section 13. For personal protection see section 8. For waste disposal

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling contact with skin and

Avoid handling which leads to dust formation. Avoid

eyes. Observe occupational exposure limits and minimize the risk of inhalation of dust. Use appropriate PPE. Handle in accordance with good industrial hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

May be stored in piles, does not require covered storage. If stored in stockpile at dry and windy weather keep slags moist to avoid dust formation. Keep away from food and drinking water.

### 7.3 Specific end use(s) 1.2

The identified uses for this product are detailed in section

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## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

Name	STD	TWA – 8hrs		STEL – 15mins		Notes
Dust	WEL	4 mg/m <sup>3</sup> respirable dust	10 mg/m <sup>3</sup> total dust			

WEL = Workplace Exposure Limit

### 8.2 Exposure controls

Protective equipment



Engineering measures:

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Respiratory equipment: protection must be used if

No specific recommendation made, but respiratory

The general level exceeds the recommended occupational exposure limit.

Wear dust masks (FFP2 according the EN149) in dusty areas.

Hand protection:

Wear protective gloves.

Eye protection:

Wear eye protection with side protection (standard EN166 Eye Protection) where there is a danger of eye contact.

Other protection:

Provide eyewash station.

Hygiene measures:

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic and physical and chemical properties

Appearance:	Dust, granules (grain size 0 – 6.3mm)
Colour:	Grey-brown
Odour:	Odourless
Melting Point:	>1000°C
Solubility:	<1g <sup>l</sup> <sup>-1</sup> ; not soluble in organic solvents
Relative Density:	@2.4- 3 gcm <sup>-3</sup>
Bulk Density:	1.9 – 2.0 gcm <sup>-3</sup>
pH-Value:	10-12

**9.2 Other information** Not relevant

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	No specific reactivity hazards associated with this product.
<b>10.2 Chemical stability</b>	Stable under normal temperature conditions.
<b>10.3 Possibility of hazardous reactions</b>	Not relevant
<b>10.4 Conditions to avoid</b>	Avoid generation of dust.
<b>10.5 Incompatible materials</b>	
Materials to avoid:	Acids.
<b>10.6 Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition
	Products should not be produced

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity:	Not classified
Acute toxicity (Oral LD50):	Not classified (OECD Guideline 401)
Acute toxicity (Dermal LD50):	Not classified (OECD Guideline 402)
Acute toxicity (Inhalation LC50):	Not classified (OECD Guideline 403)
Skin corrosion/irritation:	Not irritating (OECD Guideline 404)
Serious eye damage/irritation:	Not irritating. (OECD Guideline 405)
Skin sensitization:	Not sensitizing. (GLP guideline study)
Respiratory sensitization:	Not sensitizing. No data available.
Germ cell mutagenicity:	Not classified. (EU Method B.17 and OECD Guideline 474)
Carcinogenicity:	Not classified. (There is no evidence that the product can cause cancer)
Reproductive toxicity: (reproduction)	Not classified (This substance has no evidence of toxicity to reproduction)
STOT-single exposure:	Not classified as a specific target organ toxicant after a single exposure
STOT- repeated exposure:	Not classified as a specific target organ toxicant after repeated exposure
Aspiration hazard: based on chemical structure)	Not classified (Not anticipated to present an aspiration hazard, based on chemical structure)

## SECTION 12: Ecological information

12.1 Toxicity:	Not classified (OECD TG 201, 202, 203, 211)
12.2 Persistence and degradability	Not relevant.
12.3 Bioaccumulative potential:	No significant accumulation.
12.4 Mobility in soil:	Not relevant, due to the form of the product.
12.5 Results of PBT and vPvB assessment:	No data available.



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12.6 **Other adverse effects:** None known

## SECTION 13: Disposal considerations

13.1 **Waste treatment methods:** Dispose of waste and residues in accordance with local authority requirements.

## SECTION 14: Transport considerations

Road transport notes: Not classified  
Rail transport notes: Not classified  
Sea transport notes: Not classified  
Air transport notes: Not classified

- 14.1 **UN Number:** The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
- 14.2 **DOT/IMO Label:** NA
- 14.3 **UN proper shipping name:** Not classified for transportation.
- 14.4 **Transport and hazard class (es):** Not classified for transportation.
- 14.5 **Packing group:** Not classified for transportation.
- 14.6 **Environmental hazards**  
Environmentally hazardous substances / marine pollutant: no
- 14.7 **Special precautions for user:** Not classified for transportation.

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## SECTION 14: Transport considerations

### 14.1 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

3 (6.1)

3 (6.1)

3 (6.1)

Transport hazard class(es)



## SECTION 15: Regulatory information

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

Approved code of practice:

Classification and labelling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations.

Guidance notes:

Workplace Exposure Limits EH40.

EU Legislation:

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulations (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

### 15.2 Chemical Safety Assessment:

Not applicable. No chemical safety assessment has been carried out.

## SECTION 16: Other information

Revision date: 23/06/2020  
Revision: 2  
Document no: 12-02EN,20-06  
Risk phrases in full: NC – not classified  
OECD – Organization for Economic Co-operation and Development  
STOT – Specific Target Organ Toxicity  
TG – Test Guidelines

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Approved By: Q.C. Manager

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