

REVISION NO : 3 August 2010	MATERIAL SAFETY DATA SHEET	MSDS NUMBER-024
1. PRODUCT AND COMPA	NY IDENTIFICATION	
Product Name	Magnalium Powder (Alloy of Magnesium an	d Aluminium)
Chemical Symbol	Mg/Al Mg Al	
CAS No	7439-95-4 7429-90-5	
EINECS No	231-104-6 231-072-3	
Supplier Name & Address	THE METAL POWDER COMPANY LTD	
	Thirumangalam - 625706	
	Tamil Nadu, India	
	Phone No: +91-4549-281995(4 Lines)	
	Fax No : +91-4549-280689	
	E-Mail : <u>info@mepco.co.in</u>	
	Website: <u>www.mepco.co.in</u>	
Trade Name	MAN - 10 MAN - 100 SC	
	MAN - 50 MAN - 100 SCD (B)	
	MAN - 100 MAN - 52/100	
	MAN - 10 SC MAN - 10 SCU	
	MAN - 40/60 MAN -50 SCU	
	MAN - 200SC	
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2. COMPOSITION/INFORMATION ON INGREDIENTS			
NAME	CAS NO	UN NO	
Magnesium	7439-95-4	1418	
Aluminium	7429-90-5	1396	

3. HAZARDS IDENTIFICATION

Human Health Harmful

Environment Toxic for aquatic organisms

Physical

If suspended in air (dust cloud), fine powder can be ignited in the presence of an ignition source and cloud pose an explosion risk in a confined environment.

Chemical

Prolonged contact with water may result in reaction releasing flammable hydrogen gas - Fire and Explosion Risk. Will react with oxidising agents, causing heat and hydrogen release - Fire and Explosion Risk. Magnalium fire forms dense white smoke and very bright flame.



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4. FIRST AID MEASURES

Inhalation: Harmful

Skin Contact: Wash off with plenty of water - Remove the contaminated clothing.

Eye Contact: Rinse eye with running water. Obtain medical attention if symptoms persist.

Ingestion: Rinse out mouth and then drink copious amount of water. Do not induce vomiting. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Agents

a) Gently smother burning material with dry sand

Unsuitable Extinguishing Agents

- a) Water
- b) Foam
- c) CO₂
- d) Dry chemical powder

Special hazards caused by the substance, its products of combustion or resulting gases

- a) Dust can combine with air to form an explosive mixture
- b) Contact with water releases flammable gas (hydrogen)

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

- a) Avoid generation of dust clouds.
- b) Keep away ignition sources

Environmental protection

Do not allow product to enter sewage system or water courses (possible reaction releasing hydrogen).



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Measures for cleaning/collection spillages:

a)Clean the material using non-sparking tools (eg. Natural fibre broom). Avoid formation of dust clouds. b)Do not flush with water.

7. HANDLING AND STORAGE

Handling

Avoid generation of dust clouds.

Avoid sources of sparks or other sources of ignition.

Protect against static electricity.

Use non sparking tools.

Keep work area clean.

Avoid accidental contact with reactive materials - acids or chemicals - oxidisers etc.

Storage

Store in the supplied containers until used, with tightly closed lid.

Keep in closed dry room or store

The area should be suitably marked to indicate the presence of an ignitable dust.

No smoking - warning should be present.

Avoid sparks or other source of ignition.

Keep area clean and avoid spillage

Do not store with reactive materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Workplace Exposure

Longterm exposure (TLV) - 8hrs TWA - 10mg/m³

Exposure Controls

Respiratory Protection

A suitable face mask is recommended if regular exposure is unavoidable. If workplace concentration requires the use of respiratory protection - Use filter types.

Eye protection

Not normally required. Irritation may occur as with any dust entering the eye - wash out immediately if it occurs.



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Skin Contact

Wash off with plenty of water - Remove the contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State - Solid

Form - Irregular particles

Color - Grey
Odour - Odourless
P.H. - N/A
Boiling Temperature - N/A
Melting Temperature - 435°C
Flash Point - N/A

Autoflammability - Product is not self igniting.

Explosive properties - Lower Explosive Limit (LEL) - 20gm/m³

Minimum Ignition Temperature- Cloud 430°C

Layer 480°C

Oxidising properties - Will react exothermically if mixed with a strong oxidising substance.

and ignited

Real Density - 2.0 gm/cm³

Solubility - Insoluble in water

10. STABILITY AND REACTIVITY

Stability

Stable when dry. No decomposition

Reactivity

May react with acids or oxidising agents.

Prolonged contact with water can cause a reaction releasing hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

No data available

Chronic Toxicity

May cause irritation to the respiratory tract and eyes. May result poor wound healing tendency after penetration to the skin.

TLV - 10mg/m³ (General Dust Limit)



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12. ECOLOGICAL INFORMATION

Mobility/Degradability

Will convert to Magnesium Oxide and Aluminium Oxide during prolonged contact with water.

Ecotoxicity

Magnalium powder is toxic for aquatic organisms.

Generally not hazardous to water.

13. DISPOSAL CONSIDERATIONS

Waste

Dispose of in line with regional or national regulations.

Avoid product entering watercourses/sewer systems

14. TRANSPORT INFORMATION

Transport over land ADR/RID clas.	- 4.3 with 4.2	Correct technical name:-
Transport over sea IMDG class	- 4.3 with 4.2	Magnesium Alloy Powder
Transport over ICAO/IATA class	- 4.3 with 4.2	UN No 1418
Packaging group		Em S No F-G,S-O

15. REGULATORY INFORMATION

Label: UN classification - 4.3 Dangerous when wet

Subsidiary label 4.2 Substances liable to spontaneous combustion

Risks

Risk Phrase - 10,15 R-10- Flammable

R-15- Contact with water liberates extremely flammable gas

Safety

Safety Phrase - 7/8,43.6 S-7/8 - Keep container tightly closed and dry

S-43.6 - In case of fire, use sand - Never use water.

16. OTHER INFORMATION

The information contained herein is based on the present state of our knowledge. It is believed to be reliable but no representation, guarantee of any kind are made.