The Metal Powder Company Limited

REVISION NO : 6 January 2015	MATERIAL SAFETY DATA SHEET	MSDS NUMBER - 006

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**Aluminium Powder - Coated**
Chemical Symbol	**Al** **Stearic Acid**
CAS No	**7429-90-5** **57-11-4**
EINECS No	**231-072-3** **200-313-4**
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 : info@mepco.co.in Website : www.mepco.co.in
Trade Name	**000** **444** **LI55** **CO99-IV** **111** **333** **FL77** **555** **333S** **SL77** **999** **FP33** **CO66** **999S** **222** **CO77** **LD999** **FF03** **CO88** **666** **FF05** **CO99** **666-O** **PO55** **CO88-IV**

2. COMPOSITION/INFORMATION ON INGREDIENTS

NAME	CAS NO	UN NO
Aluminium	7429-90-5	1309
Stearic Acid	57-11-4	1325

3. HAZARDS IDENTIFICATION

Human Health No data available.
Environment No data available.

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 oxidizing agents or acids and alkalis, causing heat and hydrogen release-Fire and Explosion risk Can react violently with halogenated hydrocarbons - Explosion risk

4. FIRST AID MEASURES

Inhalation: No known health risk - treat as nuisance dust

Skin Contact : Wash off with plenty of water

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) CO_2
c) Foam
d) Dry Chemical Powder
e) Halogenated hydrocarbon fire extinguisher

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 formation 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)

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 suitable explosion proof equipment and spark-proof tools

Keep work area clean

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

Use non sparking tools

Storage

Store in the supplied containers until used

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 - 10 mg/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

Skin Contact

Wash off with plenty of water - Remove the contaminated clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	-	Solid
Form	-	Flaky particles
Color	-	Grey
Odour	-	Odourless
P.H.	-	N/A
Boiling Temperature	-	2467°C
Melting Temperature	-	660°C
Flash Point	-	N/A
Autoflammability	-	Product is not self igniting.
Explosive properties	-	Fine Aluminium powder may be explosive if disperse into a dust cloud in air in the presence of a source of ignition. Lower Explosive Limit (LEL) - 40gm/m³
Minimum Ignition Temperature	-	Cloud 610ºC Layer 320ºC
Oxidising properties	-	Will react exothermically if mixed with a strong oxidising substance and ignited
Real Density	-	2.7 gm/cm³
Solubility	-	Insoluble in water and organic solvents

10. STABILITY AND REACTIVITY

Stability

Stable when dry. No decomposition

Reactivity

May react with acids or oxidising agents or halogenated hydrocarbons

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

No data available

Chronic Toxicity

No Chronic effects known

TLV - 10mg/m³ (General Dust Limit)

12. ECOLOGICAL INFORMATION

Mobility/Degradability

Will convert to Aluminium Oxide (alumina) during prolonged contact with water

Ecotoxicity

Aluminium powder is not ecotoxic

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 class	- 4.1	Correct Technical Name :-
Transport over sea IMDG class	- 4.1	Aluminium Powder, coated.
Transport over ICAO/IATA class	- 4.1	UN No:- 1309
Packaging group	- II	Ems No:- F-G, S-G.

15. REGULATORY INFORMATION

Label : UN classification - 4.1 Flammable solids

Risk

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.


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