



## MATERIAL SAFETY DATA SHEET

REVISION NO. 2, June 2007

### 1. PRODUCT INFORMATION

**Product Name** : Aluminium Paste (Mixture of Aluminium Powder coated & Mineral turpentine)  
**Chemical Symbol** : Al M.T.O.  
**CAS No.** : 7429-90-5 8008-20-6  
**EINECS No.** : 231-072-3 -

**2. ITEM NO.** : MS6501, MS6502, MS6504, MS6505, MS6506, MS6507, MS6508, MS6509, TM07, TM08, TM09, TM10

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS NO.	UN NO
Aluminium	7429-90-5	1309
M.T.O.	8008-20-6	1223

### 4. HAZARDS

**Health Hazard** - Harmful if inhaled

**Environmental** - No data available

**Physical** - Fine powder is flammable. If a cloud of aluminium dust is raised in the presence of a source of ignition, there is the risk of explosion in confined spaces.

**Chemical** -

- Fire & Explosion risk - Prolonged contact with water may result in reaction releasing flammable hydrogen gas.
- Will react with oxidizing agents or acids and alkalis, causing heat and hydrogen release which can result in fire and explosion.
- Can react violently with halogenated hydrocarbons causing explosion

### 5. 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 such as acids or chemicals, oxidisers etc.
- Use non sparking tools
- Use hand protection, face mask and foot protection

#### 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 an ignitable dust
- No smoking warning sign should be put up
- Avoid sparks or other source of ignition
- Keep area clean and avoid spillage
- Do not store with reactive materials



## 6. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits - Workplace Exposure

- Longterm exposure (TLV) – 8hrs TWA – 10mg/m<sup>3</sup>

### Exposure Controls

- Respiratory Protection - A suitable face mask is recommended for those working with these materials. Use filter types preferably.
- Eye Protection – Not essential.
- Skin Contact – Wear protective clothing

## 7. FIRST AID MEASURES

- Skin contact:** Wash off with plenty of water and remove contaminated clothing
- Eye contact:** Rinse with plenty of running water. Obtain medical attention if symptoms persist
- Ingestion:** If ingested rinse out mouth and then drink copious amount of water. Do **not** induce vomiting. Seek medical attention.

## 8. FIRE FIGHTING MEASURES

### Suitable Extinguishing Agents:

- Dry Sand: gently smother burning material with dry sand
- Foam or Carbon Dioxide cylinder

### Unsuitable Extinguishing Agents:

- Water
- Halogenated fire extinguisher

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

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

## 9. ACCIDENTAL RELEASE MEASURES

### Environmental protection

- Do not dump the product into the sewage system or water courses (possible reaction Releasing hydrogen)

### Measures for cleaning/collection spillages:

- Clean the material using non-sparking tools e.g. natural fibre broom. Avoid raising a cloud of dust
- If dry, store in closed drums under dry conditions.
- If wet, store in open topped container in an area with good ventilation and free from ignition sources.



#### 10. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	- Semi-Solid
<b>Form</b>	- Paste
<b>Color</b>	- Silvery White
<b>Odour</b>	- Solvent Smell
<b>P.H.</b>	- N/A
<b>Boiling Temp.</b>	- 2467°C (Aluminium) 145°C – 205°C (M.T.O.)
<b>Melting Temp.</b>	- 660°C (Aluminium)
<b>Flash Point</b>	- 35°C
<b>Autoflammability</b>	- Product is not self igniting
<b>Autoignition Temp.</b>	- 252° deg C (M.T.O.)
<b>Explosive properties</b>	- No data available
<b>Min. Ignition Temp.</b>	- No data available
<b>Oxidising properties</b>	- Will react exothermically if mixed with a strong oxidising substance and ignited
<b>Real density</b>	- 1.4 – 1.6gm/cm <sup>3</sup>
<b>Solubility</b>	- Insoluble in water

#### 11. STABILITY and REACTIVITY

<b>Stability</b>	- Stable at room temp.
<b>Reactivity</b>	- May react with acids or oxidising agents or halogenated Hydrocarbons

#### 12. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	- no data available
<b>Chronic Toxicity</b>	- No chronic effects know TLV – 10mg/m <sup>3</sup> (General Dust Limit)

#### 13. ECOLOGICAL INFORMATION

<b>Mobility/Degradability</b>	- Will convert to aluminium oxide (alumina) during prolonged contact with water
<b>Ecotoxicity</b>	- Aluminium paste is not ecotoxic - Generally not hazardous to water

#### 14. DISPOSAL CONSIDERATIONS

**Waste** : Dispose of in line with regional or national regulations.  
Avoid product entering watercourses/sewer systems

#### 15. TRANSPORT INFORMATION

Transport over land ADR/RID class	- 4.1
Transport over sea IMDG class	- 4.1
Transport over ICAO/IATA class	- 4.1
Packaging group	- II

#### 16. REGULATORY INFORMATION

**Label:** UN classification – 4.1 Flammable solids  
**Risks:** Risks Phrase – 10, 15 R-10 Flammable  
R-15 Contact with water liberates extremely flammable gas  
**Safety:** Safety Phrase – 7/8, 43, 4/43.6 S-7/8 - Keep container tightly closed and dry  
S-43.4/43.6 - In case of fire, use Carbon dioxide or sand  
**Never use water.**

#### 17. 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.

#### 18. CONTACT DETAILS: for any queries contact us at:

**Tel: 852 25721085; Fax: 852 28384965; e-mail: info@metalpowders.biz**