

# MMP Industries Limited

B-24, MIDC, Hingna Road, Nagpur-440016  
CIN : L32300MH1973PLC030813

Tel : (07104) 668000,  
Email : sales@mmpil.com  
Web : www.mmpil.com



## MATERIAL SAFETY DATA SHEET

REV # : 2 (Jan - 2020)

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Aluminium Powder Atomised( Non Lamellar)
Application	Mining Explosives, Refractories, Brake Lining, Thermit Application etc.
Supplier Name & Address	<b>MMP INDUSTRIES LIMITED</b> Regd. Office: 211, Shrimohini, 345, Kingsway, Nagpur – 440 001. Ph # 0712-2524645/2533585 Corporate office : B-24, MIDC Hingna, Nagpur – 440016 Ph #07104 668000 Email : <a href="mailto:sales@mmpil.com">sales@mmpil.com</a> Website: <a href="http://www.mmpil.com">www.mmpil.com</a>

### Grades

#### Atomized Powders

MMP-1030

MMP-3060

MMP-1000

MMP-1500

MMP-2000

MMP-3000

MMP-3000R

MMP-4000

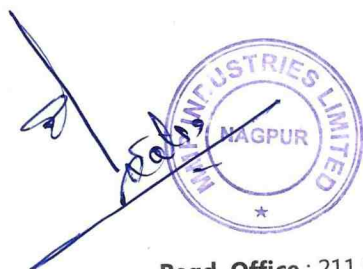
# For specification details: Please visit website [www.mmpil.com](http://www.mmpil.com)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

NAME	CAS NO.	EINECS NO	+ COMPOSITION
Aluminium Powder	7429-90-5	231-072-3	100%
♦ Stearic Acid	57-11-4	200-313-4	As per Customer's requirement

### 3. HAZARDS IDENTIFICATION

3.1. Skin contact:	Irritation, dermatitis on prolonged contact.
3.2. Eye contact:	Irritation.
3.3. Inhalation:	NA
<b>Explosion:</b>	
3.4. Dust cloud:	In presence of spark, dust cloud may result in explosion as such strictly avoid dust dispersal.
<b>Fire:</b>	
3.5. Gas evolution:	Powders in presence of excessive moisture/ water may result in evolution of hydrogen gas which can form explosive mixture with air & ignition source.



Regd. Office : 211 Shrimohini, 345 Kingsway, Nagpur-440001, India. Tel : (0712) 2533585  
Works : Village Maregaon, Post: Shahpur, Dist. Bhandara-441906, India. Tel : (07184) 282620  
Works : D-15/2 & D-16, MIDC Umred, Dist. Nagpur - 441 203, India. Tel : 7066012324  
Certified for: ISO 9001:2015, ISO 45001:2018, ISO 14001:2015

<b>4. FIRST AID MEASURES</b>	
<b>4.1. Skin Contact</b>	Flush with soap & water.
<b>4.2. Eye Contact</b>	If overcome by vapours, remove immediately from exposure. If powder ingress, flush eyes with ample water with eyelids held open.
<b>4.3. Ingestion</b>	Low toxicity risk. Do not induce vomiting.
<b>4.4. Inhalation</b>	Isolate the exposed person to fresh air & provide rest.
# After providing first aid treatment, seek medical attention and advice.	
<b>5. FIRE FIGHTING MEASURES</b>	
<b>Unusual Fire and Explosion Hazard</b>	Use Class "D" dry chemical extinguishing agent or other suitable extinguishing material such as dry sand. Do not use class "A", "B" or "C" extinguishers or halogenated agents. Do not use water. Water and burning finely divided aluminium react violently forming hydrogen gas and aluminium oxide. Aluminium particles will burn at a very high temperature as a mass of material will be potentially explosive, if loosened and dispersed in air. At no point of time, allow a dust cloud to be formed. This material is potentially explosive when loosened and dispersed in air. Do not use vacuum cleaners.
<b>Special Fire Fighting Procedure</b>	Gently cover the burning powder and form a ring around it with the extinguishing agents recommended., such as Dry Sand and Class D –dry chemical powder. Do not actually mix the agent with the burning powder and do not disturb the powder until it cools to ambient temperature. At no point of time allow dust clouds to be formed. Fire fighters should wear self-contained breathing apparatus and protective clothings. Do not use pressurised Fire Extinguishers over the burning Powders.
<b>6. ACCIDENTAL RELEASE &amp; MEASURES</b>	
<ul style="list-style-type: none"> <li>➤ Avoid any source of ignition (open flames, heat/static discharges) during handling.</li> <li>➤ Do not smoke.</li> <li>➤ Avoid formation of dust cloud.</li> <li>➤ Product can release vapours (in presence of Additives) that can form explosive mixtures with air.</li> <li>➤ Use Protective personal equipments.</li> <li>➤ Dispose contaminated material as waste (Ref. Sr. no.13).</li> </ul>	
<b>7. HANDLING AND STORAGE</b>	
<ul style="list-style-type: none"> <li>➤ Store away from open fire sources of ignition, heat &amp; humidity store at ambient temperature in a well-ventilated area with flame proof electrical fittings.</li> <li>➤ Store away from oxidizing agents/acids &amp; alkalis or combustible materials.</li> <li>➤ Strictly avoid spark generating tools.</li> <li>➤ Keep containers tightly closed in cool &amp; dry place.</li> </ul>	
<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>	
<b>Exposure Controls:</b>	
<b>Respiratory Protection</b>	Use specialty respirators suited to filter fine dusts.
<b>Eye protection</b>	Use safety goggles to avoid the risk of aluminium powder contact with eye.
<b>Skin Contact</b>	Use protective clothing's/impervious gloves. Use skin protection cream.
<b>Clothing</b>	Use pure cotton clothing to prevent static charge build-up..



**9. PHYSICAL AND CHEMICAL PROPERTIES**

Characteristics/Item	Al. Powder Atomized (Non Lamellar)	Stearic Acid
Atomic Weight	26.97	N/A
Physical state	Solid	Solid
Appearance	Silvery Grey powder	Free flowing Waxy Flakes
Odour	Coated powders have fatty acid odour	
pH at 27 *C	N/A	N/A
Vapour Density	Heavier than Air	N/A
Evaporation Rate	Slower than butyl acetate	N/A
Melting Point	660*C	58-62*C
Boiling Point	2467*C	361*C
Flash Point	N/A	N/A
Auto-ignition Temperature	N/A	N/A
Auto-flammability	Not Flammatory	N/A
Relative Density (gm/cc <sup>3</sup> )	2.70	0.84
Bulk Density (gm/cc <sup>3</sup> )	0.9 to 1.2 (As per type)	N/A
Solubility in water	Insoluble	Insoluble
Oxidizing Properties	N/A	Incompatible with oxidizers & reducing agents
Explosive Property	Product is non-hazardous however, it forms an explosive dust/air mixture	Can heat spontaneously
Explosion Limit	LEL 30 g/m <sup>3</sup>	N/A

**10. STABILITY AND REACTIVITY**

Stability	Stable at room temperature.
Reactivity	a. Reacts with acids, alkalis and oxidising agents. b. Prolonged contact with water can cause a reaction by releasing hydrogen gas.

**11. TOXICOLOGICAL INFORMATION**

Acute Toxicity	Data not available
Chronic Toxicity	Data not available
Irritation	None

**12. ECOLOGICAL INFORMATION**

Mobility/Degradability	Will convert to Aluminium Oxide during prolonged contact with water. Inform local authority in case of dispersal of powders in water course or sewer system.
Eco-toxicity	Not an eco-toxic material.



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## 13. DISPOSAL CONSIDERATIONS

<b>Waste</b>	a. Dispose in line with regional or national regulations. b. Avoid product entering watercourses/sewer systems as there is a chance for Hydrogen evolution.
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## 14. TRANSPORT INFORMATION

<b>Transport over sea IMDG class</b>	4.1
<b>Packaging group</b>	II
<b>Correct technical name</b>	Aluminium Powder Atomized (Non Lamellar)
<b>UN No.</b>	1309
<b>IIEm No.</b>	F-G, S-G

## 15. REGULATORY INFORMATION

<b>Label</b>	
<b>UN classification</b>	4.1 Flammable solids
<b>Risk</b>	
<b>Risk Phrase</b>	10, 15 R-10- Flammable R-15-Contact with water liberates extremely flammable gas
<b>Safety</b>	
<b>Safety Phrase</b>	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

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

## 16 A REFERENCES

- Aluminium Association's Bulletin TR.2  
"Recommendations for storage and handling of Aluminium Powders & Paste".
- National Fire Protection Association's NFPA -484  
"Standard for combustible metals."



**MMP INDUSTRIES LTD.**  
Formerly Known as Maharashtra Metal Powders Ltd.

*[Signature]*  
**Authorised Signatory**

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