# MATERIAL SAFETY DATA SHEET

Date : June14, 2021		
REVISION: H.S.NO. 321290000	SAFETY DATA SHEET	
DATE: June14, 2021	Name of goods: waterborne ALUMINUM PASTE	
1. PRODUCT AND COMPANY IDENTIFICATION		
1.1 Name of goods:	ALUMINUM Paste	
1.2 Content (% by weight)	Name of substance	
65%	Aluminium powder	
	CASNO7429-90-5 EINECS NO231-072-3	
35%	SILICA+ISPANOL+ETHYLENE GLYCOL	
1.3 producer:Shandong jie han metal material co.,Ltd		
Add:Qingyang Industrial Park, Zouping City, Shandong, China 250033		
web: http://www.jhaluminiumpaste.com/		
2. COMPOSITION/INFORMATION ON INGREDIENTS		
Typical Trace Elements		
2.1 Flaky aluminium powder: 70%		
2.2 silica+ispanol+ethylene glycol 30%		
These elements are in a chemic ally combined form with the aluminium and in very low levels. They		
pose no hazard to health as far as is currently known.		
3. HAZARDS IDENTIFICATION		
3.1 Human Health—None known		
3.2 Environment – None		
3.3 Physical and Chemical		
Prolonged contact with water may result in a reaction releasing hydrogen- ignition risk.		
Will react with oxidising agents causing heating and hydrogen release—explosion risk.		
If the temperature is higher than the flash point the solvent would be fired.		

4. FIRST AID MEASURES

4.1 Skin Contact--- No danger

4.2 Eyes--- Irrigation may be caused as with any other dust. Wash out immediately.

4.3 Inhalation--- No known health risk—treat as nuisance dust. See Section 8.

### 5. FIRE FIGHTING MEASURES

### 5.1 Suitable

Gently smother burning material with DRY sand or other inert substance. Class D –Dry powder extinguishers with spin applicators for smother effect application may be used carefully. If possible isolate burning material.

### 5.2 Unsuitable

Do not use water.

Do not disturb burning material to cause a dust cloud.

Do not use halogenated extinguishing based media.

## 5.3 Protection of Fire Fighters

No special requirements.

Aluminium paste may be fired when temperature is higher than the flash point the solvent.

### 6. ACCIDENTAL RELEASE MEASURES

6.1 Accidental Spillage During Transport To End User

### 6.1.1 Personal Precautions

Remove all source of ignition – no smoking – no naked flames- no sparks from cutting equipment.

Clear people from the immediate area – fire risk.

### 6.1.2 Environmental Precautions

Avoid spillage into water channels-sewers-drains etc. (possible reaction releasing hydrogen )

# 6.1.3 Disposal Considerations

Carefully sweep up using natural bristle broom If dry the collected dust may be stored in sealed drums in dry conditions If wet the collected dust must be kept in open topped containers in an area with good ventilation and free from ignition sources (potential hydrogen release). 6.2 Spillage At End User

Good housekeeping is essential where dust is handled.

Spillage should be cleaned up as soon as possible after it occurs.

A vacuum cleaner specifically designed with safety features suitable for use with ignitable dusts should be used if available.

If suction equipment is not available careful sweeping and storage as above under 6.1.3. Use none sparking tools – shovels etc. in closed areas.

Dust protection face masks may be necessary if spillage is large.

#### 7. HANDLING AND STORAGE

#### 7.1 Handling

Avoid generation of dust clouds.

Remove any source of sparks or ignition i.e. no grinding- naked flames-smoking etc.

Protect against static electricity.

Earth all equipment.

Use electrically conductive material when possible.

Use suitable dust tight electrical equipment.

Keep work area clean.

Use protective face mask if necessary.

Avoid accidental contact with reactive materials –acids or chemicals- oxidisers etc. Use non sparking tools.

#### 7.2 Storage

Store in the supplied containers until used.

Keep in closed dry room or store at a temperature below the flash point of the solvent.

The area should be suitably marked to indicated 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 i.e. acids- oxidising agents or other chemicals with which aluminium can react.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Respiratory Protection A suitable face mask is recommended if regular exposure is unavoidable.		
8.2 Eye Protection Not normally required. Irritation may occur as with any dust entering the eye- wash out immediately if it occurs.		
<ul><li>8.3 Skin Contact</li><li>No hazard present.</li><li>No specific protection required.</li></ul>		
9. PHYSICAL AND CHEMICAL PROPERTIES		
9.1 Physical State - Solid		
9.2 Form - Aluminium paste		
9.3 Colour - Silver		
9.4 Odour - Gas		
9.5 P.H N/A		
9.6 Boiling Temperature - 2467°C (Al)		
9.7 Melting Temperature- $660^{\circ}$ C (Al)9.8 Flash Point- $62^{\circ}$ C		
9.9 Autoflammabilitity -		
<ul> <li>9.10 Explosive Properties - Aluminium paste is safer than aluminium powder but it may be explosive if dispersed into a dust cloud in air in the presence of a source of ignition.</li> </ul>		
9.11 Oxidising Properties - Will react exothermically if mixed with a strong oxidising substance and ignited.		
9.12 Relative Density - 0.96~1.44 g/cc.		
<ul> <li>9.13 Solubility - Insoluble in water.</li> <li>- Insoluble in organic solvents</li> </ul>		
10. STABILITY AND REACTIVITY		

# 10.1 Stability

Stable when dry.

# 10.2 Reactivity

May react with acids or oxiding agents or halogenated hydrocarbons. Prolonged contact with water can cause a reaction releasing hydrogen.

# 11. TOXICOLOGICAL INFORMATION

11.1 To date no dangerous health effects have been detected in normal use.

See Section 4 – First Aid Measures See Section 8 – Exposure Controls.

# 12. ECOLOGICAL INFORMATION

12.1 Mobility/Degradability

Will convert to aluminium oxide (alumina) during prolonged contact with water.

# 12.2 Ecotoxicity

Short term effects -Nil

Long term effects –currently subject to investigation – results not yet known. Not expected to be shown as hazardous to the environment.

# 13. DISPOSAL CONSIDERATIONS

13.1 Waste/ Contaminated Packaging

Dispose of in line with regional or national regulations relevant to the location of the consumer.

# 14. TRANSPORT INFORMATION

14.1 aluminium paste –when tested in accordance with procedures in the U.N. Transport of Dangerous Goods recommendations can't meet the dangerous goods. It regards as general chemicals--non dangerours chemicals.

## 15. REGULATION INFORMATION

- 15.1 Risks
  - Keep dry!

Prolonged contact with water may lead to a reaction releasing hydrogen -ignition risk.

Ignitable dust in a disturbed cloud form.

Safety

S7/8 keep container tightly closed and dry.
S43 – in case of fire smother with dry sand.
Do not use water.
Avoid dust clouds.
Do not use a fire extinguisher unless approved Class D – dry powder with spin applicator.

16. OTHER INFORMATION

16.1 This safety information is provided in good faith despite confirmation that the product does not meet the criteria for any categories specified in the China Transport of Dangerous Goods recommendations.

16.2 Attention is drawn to the hazards which may result from the misuse of these materials.

16.3 All information contained in this document is based upon our current knowledge.