FLINT HIRE & SUPPLY LTD

PRODUCT SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or preparation

Flake Aluminium Powder - coated

1.2 Use of the substance/preparation

Inorganic Pigment, gas forming agent, chemical reactions.

1.3 Company/undertaking identification

Flint Hire & Supply Ltd
Queens Row
London
SE17 2PX

Tel: 020 7703 9786
Fax: 020 7708 4189
Email: sales@flints.co.uk
Web: www.flints.co.uk

1.4 Emergency telephone

020 7703 9786

e-mail sales@flints.co.uk

2. HAZARDS IDENTIFICATION

F / R 11-15, S 7/8-43.

Physical: If suspended in air, dust clouds can be ignited in the presence of an ignition source - Explosion Risk!

Chemical: Prolonged contact with water may result in a reaction releasing hydrogen – ignition risk.
Will react with oxidising agents, acids and alkalis, causing heating and hydrogen release - explosion risk.
Can react violently with halogens and halogenated hydrocarbons.

Adverse effects on human health: None.

Adverse effects on the environment: None.

COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Description of Material : Aluminium Powder (coated)

3.2 Hazardous Ingredients

Material : Aluminium Powder (coated) >99%
CAS No . : 7429-90-5
EINICS No. (Aluminium) : 231-072-3
Index No. : 013-002-00-1
Registration No. : No data available.
Danger symbol/R phrases : F /R11, R15

For wording of the listed phrases refer to point 16

4. FIRST AID MEASURES

General Advice: Medical attention after first aid measures.

Inhalation: Supply fresh air, consult doctor if symptoms develop.

Skin contact: Wash with mild soap and water. No special measures required.

Eye Contact: Rinse opened eye for several minutes under running water.

Ingestion: If symptoms persist, consult a doctor.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Special Powder for metal fires. Do not use water! Dry sand.

Extinguishing Media not suitable for safety reasons: Water, CO_2, Foam, Extinguishing media of class A, B, C

Special hazards caused by the substance, it's product of combustion or resulting gasses: Prolonged contact with water may result in a reaction releasing hydrogen - ignition risk

Special Protective Equipment for Fire fighters: No special equipment required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear protective equipment (as described in point 8.)
Keep unprotected persons away.
Avoid formation of dust.
Keep away from ignition sources.

Environmental precautions: Do not allow product to reach ground water, water bodies or sewerage system.
Dispose of contaminated material as waste (see point 13)

Methods for cleaning up: Do not use a vacuum cleaner, collect mechanically, do not flush with water or aqueous cleaning agents.

7. HANDLING AND STORAGE

7.1 Handling

Close containers carefully after use
Maintain good housekeeping to avoid causing dust and deposit of dust.
Keep away from sources of ignition. No smoking
Use intrinsically safe equipment and non sparking tools. Protect against electrostatic charges (e.g use full metal shovels)
Whilst refilling connect containers with earthing clamps.

7.2 Storage

Store in a cool dry place in non combustible containers (original containers preferred). Do not store together with oxidizing agents, other combustible materials, acids or alkalis. Store away from steam pipes, radiators or other sources of heat or moisture.

---

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limit values

OES: *Average daily value:* 10mg/m^3 total dust
(8hr TWA) 4mg/ m^3 respirable fraction

(Ref: EH40/2005 as consolidated with amendments Oct 2007.)

National exposure control limits must be considered.

8.2 Personal Protection

Respiratory protection: Cartridge filter type P 1 according to EN 149:2001 is recommended if exposure control limit is exceeded.

Hand Protection: Gloves according to EN 388 and 407 are recommended.

Eye Protection: Tight safety goggles.

Body Protection: Non conductive and fireproof clothing (e.g Nomex III antistatic) according to EN 531 and 1149-1.
Non conductive boot according to EN345.

General Safety and Hygiene measures: In general, no pure synthetic fibres (electrostatic charge). Wash hands before breaks and at the end of work

---

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Appearance : Silver/Grey Powder

Odour : Slightly waxy

9.2 Important health, safety and environmental information

pH: : n/a

Melting Point : 660°C

Flash Point : >600°C

Flammability : < 10 minutes (Ann. A9 CD 67/548/EEC)

Autoflammability : Not self igniting

Explosive Properties : Product is not hazardous with regard to explosions, however it may form an explosive dust/air mixture.

Explosion limit : Aluminium powder, lower 30g/m^3, upper n/d/a

Oxidising Properties : Not applicable

Vapour Pressure : Not applicable

Density : 2.7 at 20°C

Solubility in Water : Insoluble

9.3 Other Information

Boiling point : 2467°C

Partition Coefficient : N-Octyl/Water: Not examined

Apparent Density : 0.15-0.35g/c m^3 at 20°C

10. STABILITY AND REACTIVITY

10.1 Conditions to Avoid

Avoid direct sunlight and building of sparks.
Keep away from sources of ignition and naked flame.

10.2 Materials to Avoid

Water: May liberate extremely flammable hydrogen gas – Explosion risk.

Acid, Alkali, oxidizing agents: May liberate hydrogen gas under exothermic reaction – Explosion risk

Halogens, halogenated hydrocarbons: May react violently

10.3 Hazardous Decomposition Products

Reaction with water, oxidising agents, acids and alkali leads to generation of extremely flammable hydrogen – Explosion risk!

11. TOXICOLOGICAL INFORMATION

Oral toxicity	:	n/d/a
Inhalative toxicity	:	n/d/a
Dermatogical toxicity	:	n/d/a
Irritation, sensitisation	:	On skin: No irritant effect On eye: No irritant effect No sensitizing effect known.
Subacute to chronic toxicity:		No effects known

Above given information is based on long term experience.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity: Aluminium is not classed ecotoxic according to 67/548/EC
Water hazard class (WGK): Generally not hazardous to water (self classification according to VwVwS).

13. DISPOSAL CONSIDERATIONS

Product: Must not be disposed of with general waste, hand over to hazardous waste disposers. Do not allow to reach sewerage.
European waste catalogue: 12 01 04 non ferrous metal dust and particles.

U*sed packaging material:* Empty packaging thoroughly, they can be recycled after thorough and proper cleaning.

14. TRANSPORT INFORMATION

Land Transport ADR/RID (cross border)

ADR/RID	:	4.1 Flammable Solid
UN Number	:	1309
Packing Group	:	II
Hazard Label	:	4.1
Tunnel Code	:	E
Description of goods	:	Aluminium Powder, coated

Maritime Transport IMDG:

IMDG Class	:	4.1
UN Number	:	1309
Packaging group	:	II
EMS	:	F-G, S-G
Marine Pollutant	:	No
Proper shipping name	:	Aluminium powder Coated

Air Transport ICAO/IATA-DGR:

ICAO/IATA Class	:	4.1, packing instructions: 415, Y415, 417
UN Number	:	1309
Packaging group	:	II
Proper shipping name	:	Aluminium powder Coated

15. REGULATORY INFORMATION

Labelling according to EEC Directives:

Danger symbol:

R-phrases: R11 Highly flammable
R15 Contact with water liberates extremely flammable gasses

S-phrases S 7/8 Keep container closed and dry
S 43 In case of fire use dry sand. Never use water.

Regulatory information
To take into consideration: EU-Directive 67/548/EEC

---

16. OTHER INFORMATION

R 11 Highly flammable
R15 Contact with water liberates extremely flammable gasses.

Based upon European Aluminium Particulate association, Master – MSDS Aluminium powder 06.0/09.2005.

Products covered by this data sheet include:

Fine Aluminium Powder 124NS
Flake Aluminium Powder 8982
Lining aluminium Powder 400
Aluminium Ink Lining 500
Aluminium Super Ink Lining 600
(This list is not exhaustive)

Issue Date : 07 June 2010
Revision Number : 1
Safety Data Sheet N^{O}. : RB2

Abbreviations used: n/a - not applicable, n/d/a – no data available.
OES – occupational exposure standard

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date compiled. However, no warranty, guarantee or representation is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.