

Material Safety Data Sheet (MSDS)

Leafing Aluminium Paste

Aluminium pigment in mineral spirit | Aluminium CAS 7429-90-5 / Solvent CAS 64742-48-9

1. Identification of the Substance and Supplier

Product Name	Leafing Aluminium Paste
Composition	Aluminium pigment dispersed in mineral spirit (white spirit)
CAS No.	7429-90-5 (aluminium); 64742-48-9 / 8052-41-3 (mineral spirit)
Synonyms	Aluminium paste, leafing aluminium paste, aluminium pigment paste
Product Use	Metallic pigment for paints, coatings, and printing inks
Supplier	Ochnology Solution Pvt. Ltd., B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India – 248001
Contact	projects@ochnology.com bd@ochnology.com

2. Hazards Identification

GHS Classification: Flam. Liq. 3 (H226 – flammable liquid and vapour, from solvent); may release flammable hydrogen if water contacts the aluminium. **Signal word:** WARNING.

- Flammable liquid and vapour (H226) – contains mineral spirit solvent
- Solvent vapour may form flammable / explosive mixtures with air
- Contact of the aluminium with water can release flammable hydrogen gas
- Solvent may cause skin / eye irritation and may be harmful if inhaled or swallowed
- Dried-out paste behaves as flammable / reactive aluminium powder

3. Composition / Information on Ingredients

Component	CAS No.	Concentration
Aluminium pigment (Al)	7429-90-5	65 – 70%
Mineral spirit / white spirit (solvent)	64742-48-9 / 8052-41-3	30 – 35%
Additives (lubricant / leafing agent)	Various	Minor

4. First-Aid Measures

Inhalation: Move to fresh air. Seek medical attention if dizziness, headache, or breathing difficulty occurs (solvent vapour).

Skin Contact: Wash with soap and water; remove contaminated clothing. Solvent may degrease / irritate skin.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present. Seek medical attention if irritation persists.

Ingestion: Do NOT induce vomiting (aspiration hazard from solvent). Rinse mouth; seek immediate medical attention.

5. Fire-Fighting Measures

- Flammable liquid – use foam, dry chemical, CO₂, or dry sand
- Do NOT use a water jet (may spread fire); water spray may cool containers
- Note: dried residue is reactive aluminium – avoid water on burning dried metal
- Wear full protective equipment and self-contained breathing apparatus (SCBA)

6. Accidental Release Measures

- Eliminate ignition sources; ventilate the area (flammable vapour)
- Absorb with inert absorbent; collect into sealed, labelled containers
- Avoid letting the paste dry out (residue becomes reactive metal)
- Wear full PPE; use earthed, non-sparking equipment; prevent entry into drains

7. Handling and Storage

- Keep away from heat, sparks, open flame, and oxidisers – flammable solvent
- Keep containers tightly closed; bond and ground when transferring
- Store in a cool, well-ventilated area; keep away from water
- Use flameproof equipment and full PPE; ensure good ventilation

8. Exposure Controls / Personal Protection

- Mineral spirit / white spirit: 300 mg/m³ (approx., 8-hr TWA) – typical reference value
- Aluminium (as Al): 1 mg/m³ respirable – typical reference value
- Provide ventilation to keep solvent vapour below exposure limits
- Respiratory protection for vapour, chemical goggles, solvent-resistant gloves

9. Physical and Chemical Properties

Property	Value
Appearance	Silvery-grey metallic paste
Odour	Characteristic solvent (hydrocarbon) odour
Flash Point	Approx. 38 – 42°C (mineral spirit; flammable liquid)
Solubility in Water	Insoluble (solvent-based)
Relative Density	Approx. 1.1 – 1.4 (grade dependent)
Vapour	Flammable solvent vapour, heavier than air

10. Stability and Reactivity

- Stable when sealed, cool, and away from ignition sources
- Flammable solvent vapour; keep from heat and oxidisers
- If allowed to dry, the aluminium residue is reactive (water-reactive / flammable)
- Reacts with strong oxidisers, acids, and alkalis

11. Toxicological Information

- Solvent: inhalation of vapour may cause headache, dizziness, or narcosis at high concentration
- Aspiration of solvent if swallowed can cause chemical pneumonitis
- Solvent may degrease and irritate skin on repeated contact
- Aluminium pigment itself is of low systemic toxicity

12. Ecological Information

- Solvent may be harmful to aquatic life; prevent release into water
- Do not allow product to enter drains, soil, or watercourses
- Dispose of as solvent-containing waste per regulations
- Recover where possible

13. Disposal Considerations

- Dispose of as flammable, solvent-containing hazardous waste per local regulations
- Do not allow to dry uncontrolled (reactive metal residue)
- Use a licensed waste contractor for disposal

14. Transport Information

UN Number	UN1263 (Paint / paint-related material) – verify for the specific product
Proper Shipping Name	PAINT or PAINT RELATED MATERIAL (aluminium paste in solvent)
Hazard Class	3 (flammable liquid)
Packing Group	III (typical; verify by flash point)
Remarks	Regulated flammable-liquid dangerous goods – confirm classification before shipping

15. Regulatory Information

- Classified as a flammable liquid (Class 3) due to solvent content
- Subject to dangerous-goods transport and flammable-storage regulations
- Components listed on major chemical inventories

16. Other Information

This MSDS has been prepared in accordance with the GHS 16-section format. The principal hazard is the flammable mineral-spirit solvent; in addition, dried-out paste behaves as reactive aluminium powder. Keep sealed, away from ignition sources, and do not allow to dry. Information relates to the specific material designated.

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