Safety Data Sheet

Date of issue: June 24, 2021
Date of revision: -

1. Identification of the substance / mixture and company / undertaking

1.1 Product identifier **Aluminium paste T-030M**

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use as pigment for paints / inks / coatings only.

1.3 Manufacturer
TOYAL MMP INDIA PRIVATE LIMITED
K-61, 5 Star Zone, MIDC, Butibori, Nagpur, 441122 India
TEL: +91-7350-177076

1.4 Emergency Phones TEL (Emergency) +91-7350-177076

2. Hazards identification

2.1 Classification of the substance or mixture

Physical Hazards	Not applicable	
Health Hazards	Skin irritation	Category2
	Eye irritation	Category2A
	Skin sensitization	Category1
Environmental Hazards	Hazardous to the aquatic environment – chronic	Category2

2.2 Label elements

Signal word Warning

Hazard statements

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H411 Toxic to aquatic life with long lasting effects

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands and exposed skin thoroughly after handling.
P280 Wear protective gloves/protective clothing and eye/face protection.
P272 Contaminated work clothing must not be allowed out of the workplace.
P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/ information on ingredients

3.1. Substances Not Relevant.

3.2. Mixtures Hazardous components & related classification:

Chemical Name	Concentration	CAS Number
Aluminium flake	69 - 74 %	7429-90-5
Stearic Acid	Max. 3%	57-11-4
Turpentine, oil	26 - 28 %	8006-64-2

4. First-aid measures

4.1 Description of first aid measures

General notes: In case of persisting adverse effects, consult a physician.
Remove contaminated clothing and shoes immediately and launder thoroughly before reuse.

Inhalation: Move victim to fresh air and keep at rest and get medical attention.

Skin contact: Remove contaminated clothing/shoes, wash contaminated area with clean running water and soap.
If inflammation or pain occurs, get medical attention/advice.

Eye contact: Immediately rinse with plenty of clean running water for 15 minutes or more and get medical attention/advice. Not rub victim's eyes. In the case victim wears contact lenses, remove them if possible.

Ingestion: Not force victim to vomit. If victim is consciousness, firstly rinse mouth with water. If victim feels badly, get medical attention/advice.

Self-protection of the first aider:
In case of inhalation, first aid provider should wear protective mask, in case of skin contact, wear protective equipment such as rubber gloves.
Wear protective glasses if necessary.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No specific recommendations.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable: Powder extinguisher, carbon dioxide gas, dry sand, glass fiber clothing

Unsuitable: Water, extinguishing media containing water, halogen extinguishing media

5.2 Special hazards arising from the substance or mixture

May generate irritative and/or toxic gas by fire.
Burn if intensively heated.
May cause extremely dangerous explosion especially in closed environment (building, ware house etc.)
Package may explode by heat.
Dust or fume may form explosive mixture gas with air.
May ignite by friction, heat, spark or flame.

5.3 Advice for fire-fighters

Use powder extinguisher or carbon dioxide gas at early stage of fire where only solvent is burning.
At the final stage of fire, aluminum powder will ignite and burn with white light with releasing large heat. Try smothering extinguishment by covering the origin of fire by dry sand, glass cloth at this stage of fire. Continue smothering extinguishment until aluminum get cold because inside may be still burning without flame even when it seems to be extinguished.
Treat or transport burned aluminum powder after confirming the inside temperature did not rise after one day.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment (see 8. Exposure control/personal protection) and avoid contact with eye/skin and inhalation of gas/dust. If in doors, adequately ventilate until processing is complete.

Avoid flowing into drainage, sewage or the basement and other closed places.

6.2 Environmental precautions

Do not release leakage to river or sewage directly.

6.3 Methods and materials for containment and cleaning up

Stop leakage, if safe to do so. When leaked from the package wipe with cloth (waste cloth) and store in sealed package where no water, acid or alkali exists. Dispose of as industrial waste.

Use equipment that do not cause spark.

6.4 Prevention of secondary disaster

Refer to '8. Exposure controls/personal protection.'

7. Handling and storage

7.1 Precautions for safe handling

Install equipment described in '8. Exposure controls/personal protection' for local exhaust/total ventilation.

Do not handle until all the safety precautions have been read and understood.

Prohibit using high temperature material, spark or fire in surrounding area.

Do not eat, drink or smoke when using this product.

Wash the hands thoroughly after handling.

Avoid swallow and contact with skin.

Use only outdoors or in a well-ventilated area.

Do not breathe dust, fume, gas, mist, vapor, spray.

Install ventilation for exhaust to keep the concentration in the air below exposure limit.

Avoid release to the environment.

In case package swells by abnormal inner pressure:

Hold the lid so that it will not fly and decrease pressure by gradually loosening handle lever and open.

7.2 Conditions for safe storage, including any incompatibilities

In the store room, install the day lighting, lighting, and ventilating equipment needed for storing or handling the product.

Apply the fireproof structure to walls, pillars and floors of the storage room. Use noncombustible material for beams.

For floors of the storage room, apply a structure that prevents water influx/infiltration.

Store away from ignition sources such as heat, spark or fire.-No smoking.

Store away from oxidizing agent.

Store in sealed container at fixed place where protection from light and ventilation are adequate and temperature (40℃) and humidity are appropriate.

7.3 Specific end use(s) None in particular

8. Exposure controls/personal protection

8.1 Control parameters

Administrative level, acceptable concentration limit

	Administrative level	Acceptable concentration limit	ACGIH
Aluminium flake	-	Inhalable dust 0.5mg/m3 Total dust 2mg/m3	TWA:1mg/m3(R) STEL: -

8.2 Exposure controls

Engineering controls: Use explosion-proof electrical/ventilating/lighting equipment.
When dust/fume/mist/gas is generated at high temperature install ventilation equipment to keep concentration of air pollutant below administrative level /acceptable concentration limit.
Handle in the place where total ventilation is installed.
General proper ventilation is good for control the concentration in the air.

Personal protective equipment:

Respiratory organ: In case ventilation is not adequate, wear appropriate respiratory protection.
Use personal respiratory protective equipment as required.

Hand: Use personal protective gloves as required.

Eye: Wear appropriate eye protection.

Skin and body: Wear appropriate face protection.
Use personal antistatic protective clothing and protective mask as required.

Environmental exposure controls: Not available.

9. Physical and chemical properties

9.1 Information and chemical properties

Appearance	Silver–white solid (paste)
Odour	Petroleum
Odour threshold	N.A.
pH	N.A.
Melting point/freezing point	N.A.
Initial boiling point and final boiling range	153-175°C (Turpentine, oil)
Flash point	36°C (Turpentine, oil)
Evaporation rate	N.A.
Flammability	N.A.
Flamm. or expl. Limits	lower: 0.8% upper: 6% (Turpentine, oil)
Vapour pressure	4 mmHg at 20 °C (Turpentine, oil)
Vapour density	N.A.
Relative density	1.5 (calculated)
Solubility	Insoluble
Partition coefficient: n-octanol/water	N.A.
Auto-ignition temp.	N.A.
Decomposition temp.	N.A.
Viscosity	N.A.
Explosive Properties	N.A.
Oxidising Properties	N.A.

10. Stability and reactivity

10.1 Reactivity Stable under normal conditions.

10.2 Chemical stability Stable in air or under light shielded condition.

10.3 Possibility of hazardous reactions

React with water, acid, alkali, oxidizing agent metal oxide, halogen compound and generate hydrogen gas.

Heat accelerates the reaction. Sealed container elevates inner pressure and may burst or the content may blow out and it is especially dangerous.

10.4 Conditions to avoid

Organic solvent in the product may evaporate when temperature is elevated. Avoid contact with flame, spark, high temperature material and heating.

10.5 Incompatible materials

Avoid contact with water, acid, alkali, oxidizing agent (peroxide, sulfuric acids etc.), metal oxides (iron oxide etc.), and halogen compounds (chlorine carbon hydrides.)

10.6 Hazardous decomposition products

May generate hydrogen gas.

11. Toxicological information

11.1 Information on toxicological effects

Toxicological information of the mixture:

H315 Category 2 is more than 10% and classified as Category 2.
H319 Category 2A is more than 10% and classified as Category 2A.
H317 Category 1 is more than 0.1% and classified as Category 1.

Toxicological information on the main components of this product;

Turpentine, oil LD50 (Oral) Rat 5,760mg/kg

12. Ecological information

12.1 Toxicity

Chronic Category 2 is more than 25% and classified as Category 2.

12.2 Persistence and degradability

No information at this point.

12.3 Bio accumulative potential

No information at this point.

12.4 Mobility in soil

No information at this point.

12.5 Results of PBT and vPvB assessment

PBT and vPvB Substances: None

12.6 Other adverse effects

No information at this point.

13. Disposal considerations

13.1 Waste treatment methods

Waste to be treated as controlled waste.

Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

14. Transport information

Land Transportation:	Comply with regulations. When the product significantly leak and there is a risk of fire during transportation take precautionary measures to prevent the fire and inform nearest fire service station.
Marine transportation:	Comply with regulations.
Air transportation:	Comply with regulations.
International regulation:	UN class: 9 UN number: 3077 Packing group: III
Proper shipping name:	Environmentally Hazardous Substance, Solid, N.O.S. (Turpentine, oil)
Marine Pollutant:	Applicable

15. Regulatory information

Ensure this material is on compliance with federal requirements and ensure it is conformity to local regulations.

16. Other information

Main bibliographic sources:
Guidance for safe handling of aluminum paste 2004, 2nd revision, Japan Aluminum Association, Aluminum paste committee
ECHA: European Chemicals Agency
GHS of Classification and Labeling of Chemicals
Recommendations on the TRANSPORT OF DANGEROUS GOODS
Information on Hazardous Chemicals and Occupational Diseases

Safety Data Sheet is to provide reference information to assure the sage handling of the product. The descriptions herein are based on the currently available sources, information and data but no guarantee is given for its contents, physico-chemical properties, risk or hazard. The precautions herein are for normal handling.
If you use this product under the special conditions, take safety measures appropriate for the special use and usage.