

MATERIAL SAFETY DATA SHEET

MSDS No: LL75-0002

Company identification	
Name of manufacturer:	Mitsubishi Chemical Functional Products, Inc.
Name of division:	Composite Materials Division
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1. Product name:

ALPOLIC®/fr, Aluminum Composite Material with fire-retardant core filled with non-combustible mineral.

2. Composition / information on ingredients:

Components:

Aluminum

Polyethylene

Aluminum tri-hydroxide as non-combustible mineral filler

Coating

CAS Nos. of each component:

Aluminum: 7429-90-5

Polyethylene: 9002-88-4

Aluminum tri-hydroxide as non-combustible mineral filler: 21645-51-2

Fluorocarbon coating as coating layer: 98728-78-0 & 88795-12-4

Identification in accordance with UN:

Not defined in identifications in UN

The product does not contain asbestos.

3. Hazardous identification:

Not applicable to hazardous classifications

4. First-aid measures

Eye contact: When eyes are hurt with particle and/or powder during mechanical processing of the product, rinse affected eyes with clean running water. If irritation is persistent afterwards, get ophthalmic check immediately.

Skin contact: In case of slight burns due to heated product, flush out affected part with large amount of water immediately, to cool down the affected part. In case of serious burns, get medical check immediately.

Inhalation: When having inhaled a large quantity of powder and/or particle during mechanical processing of the product, move to fresh air, to ensure rest and keep warm, and get medical attention immediately.

Ingestion: When having ingested a large quantity of powder and/or particles during mechanical processing of the product, get medical check immediately.

5. Fire-fighting measures

Prevention of fire spread: In case of occurrence of fire near by the product, cover the products with incombustible sheet or dry sand, to prevent from fire spread to the products.

Fire extinguishing: If the product is ignited, it is effective for initial extinguishing to dash water. Fire fighting shall be done from the lower portion of the products and then to upper portion. Fire fighting shall be done from windward side with wearing air-breathing apparatus.

Extinguishing media: Water, carbon dioxide, dried chemical powder and foam fire extinguisher.

6. Accidental release measures: Not applicable.

Generally, the product is unlikely to spill out accidentally, because of solid nature.

7. Handling and storage

Handling: Wear gloves to protect hands from scratch and cut with panel edges.

Storage: Store horizontally where the products can be piled up without deflection. Do not wet the product with rain. Keep it away from such chemicals as acid, alkali, strong oxidizer and chlorides, organic solvents, spark and fire.

8. Exposure control

Control content: Not established in Ministry of Labor of Japan, Notification No.26, March 27, 1995

Permissible content: Normally, control is not required. But, when a large quantity of powder and particles are likely to occur due to mechanical processing of the product, apply the following standards as a reference value.

Applied material	ACGIH TLV, 1999 Edition	Industrial Hygiene Academy of Japan, 1999 Edition
Aluminum particle	10.0mg/m ³	Inhalant particle 0.5mg/m ³ Total particle 2mg/m ³

Note: Unless special remarks are indicated, long term work consisting of 8hrs per day and 5 days per week is available under the above condition.

Facility measures: When the particle content can not be maintained within the permissible range, provide such a suitable facility as partial ventilation.

Personal protection:

Respiratory protection: When particle and small chips exist in certain range, wear respirator.

Eye protection: When operators are exposed to particles and small chips, wear protection glasses during the operation.

Hand protection: Wear gloves to protect hands from scratch and cut with panel edges.

Skin protection: Wear working clothes and safety shoes.

9. Physical and chemical properties

Appearance: Panel of 3 to 6mm thick. Coating of 25 to 50 microns is applied on the surface.

Boiling temperature: Approx. 2500°C in aluminum

Melting temperature: Approx. 645°C in aluminum

Specific gravity: 2.7g/cm³ in aluminum

0.89 to 1.54g/cm³ in polyethylene

Solubility: Insoluble to water

10. Stability and reactivity

Flash point: Approx. 340°C in polyethylene

Ignition point: 400°C or higher in polyethylene

Possibility of self-ignition: None

Susceptibility of oxidization: None
Reactivity with water: None
Self-reactivity: None
Danger of explosion of particle: None
Other reactivity: None
Stability: Stable

11. Toxicological information

The product (4mm thick) cleared the Combustion Toxicity Testing, New York State Uniform Fire Prevention and Building Code.

There is no information available except the above.

12. Ecological information

There is no information available.

13. Disposal consideration

In accordance with official regulations for waste disposal, dispose by incineration or reclamation as factory waste.

14. Transport information

The product is packed in wooden crate for transportation. During transportation, please prevent the product from being wet.

15. Regulations

There is no applicable regulation.

16. Other information

The information contained herein is based on data currently considered accurate. No warranty, however, is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Mitsubishi Chemical Functional Products, Inc. and any associated companies assume no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with use of the material.