Trade Names: ISOLPAK ALU foil ISOLPAK ALU WHITE foil



1.) Identification of the substance/preparation and company

Product details

Trade names:

ISOLPAK ALU rigid UV/ALU/PVC foil
ISOLPAK WHITE rigid UV/ALU/PVC foil

Use: Plastic material for insulation industry

Identification of the manufacturer / supplier

Address

TTM srl

Via Pineta 102/A

39026 Prato a. Stelvio [BZ]

Italy

Telephone no. +39 0473 616170 Fax no. +39 0473 616582

2.) Composition / information on ingredients

Chemical characterization

Polymer UV Film with Aluminium and Polyvinylchloride and additives for production

Substance / product identification

Polymer film
Additives:
Adhesive
Aluminium foil
Adhesive
Adhesive
PVC-Film
Polyvinylchloride
86%

3.) Hazards possibilities

Particular information pertaining specific risk for human / environment

General Information: Low risk: Product can only form ignitable mixtures or burn if

it is heated to temperatures above the flash point

Warming: When warming the product, e.g. when welding, sufficient

ventilation should be provided. In certain cases, extractor fans

should be installed directly on the machines.

Overheating: Incorrect processing of polyolefins can lead to the formation

of low molecular decomposition products. It is therefore important

to prevent overheating of the molten material (see

also section 10).

Fire hazard: Toxic gases are produced during burning (see also section

10).

Sparking: Risk of electrostatic charging. Product can be static charged,

which can lead to an ignitable electrical discharge. All production

machinesmust be grounded correctly.

Danger of slipping: Films lying on the floor can cause a danger of slipping.

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4.) First aid measures

After inhalation

If decomposition products are inhaled, remove the affected person to a source of fresh air and keep him calm. Provide medical aid.

After skin contact

Wash off immediately with soap and water. After contact with molten product cool quickly with cold water. Do not pull solidified product from skin.

After eve contact

In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution.

After ingestion

Rinse out mouth and give plenty of water to drink.

5.) <u>Firefighting measures</u>

Suitable extinguishing media

Water spray jet; Foam; Carbon dioxide; Dry powder; Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO). Hydrogen chloride (HCI)

Special protective equipment for firefighting

Use self-contained breathing apparatus.

6.) Accidental release measures

Personal precautions

Avoid dust formation. Use personal protective clothing.

Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

Methods for cleaning up/taking up

Pick up mechanically. Rinse away rest with water. Send in suitable containers for recovery or disposal.

7.) Handling and storage

Handling

Advice on safe handling

During thermal processing and/or machining exhaust ventilation at processing machines is necessary. Take precautionary measures against electrostatic loading.

Storage

Requirements for storage rooms and vessels

No special measures required.

Further information on storage conditions

Do not store at temperatures above 60 °C. Protect from heat and direct sunlight.

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8.) Exposure controls / personal protection

Ingredients with occupational exposure limits to be monitored Polymer -. ALU - POLYVINYL CHLORIDE (IF DUST IS ISSUING)

OES/EH40 total inhalable dust

Value 10 mg/m³

OES/EH40 respirable dust

Value 4 mg/m³

Personal protective equipment

Respiratory protection

Short term: filter apparatus, Filter P2

Skin protection

No required.

General protective and hygiene measures

Do not eat, drink or smoke during work time.

9.) Physical and chemical properties

Appearance

Form cast film Color variable Odor odorless

Crystalline melting point 248 / 660 / 80 °C [Polymer / ALU / PVC]

Flash point 340°C

Density $1,4 - 1,5 \text{ g/cm}^3 \text{ (at } 23^{\circ}\text{C)}$

Safety data

Changes in physical state

Type Softening temperature

Value 75 - 85 °C

Flash point

Value 340 °C

Ignition temperature

Value > 335 °C

Method DIN 51794

Density

Value 1,4 g/cm³

Solubility in water

Remarks insoluble

pH value

Remarks not applicable

10.) Stability and reactivity

Hazardous decomposition products

Thermal decomposition products are toxic and corrosive:

Hydrocarbons - carbon dioxide - carbon monoxide - hydrochloride - smoke

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Hydrogen chloride (HCl); Carbon monoxide

Thermal decomposition

Value > 100 °C

11.) Toxicological information

Other information

According to present experience, the material is physiologically compatible. According to present experience, the material is neither mutagenic, carcinogenic nor teratogenic.

12.) Ecological information

General information / ecology

Product is insoluble in water and not biodegradable. The material has no harmful effect on the environment

13.) Disposal considerations

Product

Incineration in suitable incineration plant, observing local authority regulations.

For recycling, consult manufacturer. Recycling of the laminate is not possible. Composite wastes containing aluminium and glass.

Uncleaned packaging

Completely emptied packaging's can be given for recycling.

14.) <u>Transport information</u>

Land transport ADR/RID

Remarks non-dangerous goods

Inland waterways transport ADN/ADNR

Remarks non-dangerous goods

Marine transport IMDG/GGVSee

Remarks The product does not constitute a hazardous substance in sea transport.

Air transport ICAO/IATA

Remarks The product does not constitute a hazardous substance in air transport.

15.) Regulatory information

Labelling in accordance with EC directives

The product does not require a hazard warning label in accordance with EC directives/ GefStoffV (German regulations on dangerous substances).

16.) Other information

Other information

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

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