

Material Safety Data Sheet For The ADFIL Range of Polypropylene Fibres.

1. Identification of the Substance

Trade name: ADFIL Products
Manufacturer: ADFIL UK, Borwick Drive, Grovehill, Beverley, HU17 OHQ
Tel: +44 (0) 1482 863777
Fax: +44 (0) 1482 872800
Chemical name polypropylene: propene homopolymer
Type of product: for more detailed information, see technical data sheet.

2. Composition / Information on Ingredients

Main components: propene homopolymer: min 98 % Chemical formula: $(C_3H_6)_n$
Substances presenting a health hazard: none to our knowledge
Chemical family: Olefin polymer
Additives: polypropylene antioxidants and stabilisers: 2,0 % max.

3. Hazards Identification

Main hazards: None to our knowledge
Symptoms related to Inhalation: if heated to more than 235°C, the product may form vapours or fumes that may cause irritation of respiratory tract and cause coughing and sensation of shortness of breath.
Physico-chemical hazards: combustible if exposed to flames.
Ingestion no observable toxic effect.
Environmental impact. The product should not be harmful to aquatic life.

4. First Aid Measures

Route of exposure Inhalation: exposure to spray fumes and vapours produced by heated or burned polypropylene in the case of severe exposure to spray fumes or vapours, move the affected person into fresh air and get medical advice if the symptoms continue.
Skin contact: exposures to splashing of hot product treat the affected part with cold water (by spraying or immersion). No attempt should be made to detach molten product adhering to the skin or to remove clothing attached with molten material, usually the layer detaches itself after a few days.
Eye contact: in Case of a severe burn, seek medical advice immediately after exposures to splashing of hot product treat the eyes with cold water. Seek immediately special attention at hospital or medical centre. In case of irritation wash with copious volumes of water, until the irritation disappears.
Ingestion: ingestion during handling is not likely. In case of ingestion of small quantities, no important effect will be observed. In the case of ingestion of larger amounts this may result in abdominal pain and diarrhoea.

5. Fire - Fighting Measures

Technical measures: stop the fire spreading. Call the fire brigade immediately. Evacuate nonessential personnel. Protective clothing, goggles and self-contained breathing equipment should be made available for firemen.
Extinguishing media Suitable: for minor fires: carbon dioxide or powder for more extensive fires: foam. Water spray (mist) to cool the surfaces exposed to the fire.
Not to be used: do not use water jets (stick jets) in the early stages of extinguishing fire since they could help to spread the flames.
Combustion products: complete combustion, with an excess of oxygen forms: carbon dioxide and water vapour partial combustion, forms also: carbon monoxide, soot and cracked products: aldehydes, ketones, hydrocarbons and volatile fatty acids

6. Accidental Release Measures

Fibres spilled on the floor, should be recovered by sweeping or suction. Put in containers to facilitate its disposal, which should be in accordance with local or national regulations

7. Handling and Storage

Do not store near highly flammable materials. Store in a dry area to avoid degradation of the boxes and bags. The product is stable under normal operating conditions. **Conditions to avoid:** Avoid proximity or contact with flames or sparks. Do not heat to temperatures exceeding 300 °C

8. Exposure Controls and Personal Protection

Occupational exposure limit: respirable dust particles, which are not considered to be a hazard

Respiratory effects of fibre

Fibres may become airborne and as a result inhaled into the respiratory tract. The effects of inhalation depend upon individual sensitivity ranging from no ill effects to coughing and/or a feeling of tightness in the chest. These effects are short-lived and will be alleviated upon removal from the location or wearing of a dust mask.

Generally speaking particles smaller than 0.2 microns are not retained by the lungs whilst those greater than 5 microns are rejected by the body's defence mechanisms and do not reach the alveoli where airborne irritants do most harm. The size of particle likely to do most harm is 1-2 microns. ADFIL construction fibres have a minimum diameter of 15 microns.

9. Physical and Chemical Properties

Physical and chemical properties

Appearance: long monofilament or fibrillated fibre strands

Physical state at 20°C: solid

Colour: translucent or white opaque

Odour: odourless

Change in physical state at 1013 hPa

Melting range (°C): from 160 -165

Flash point (ASTM D 1929)(° C): ± 350

Auto-ignition temperature (°C): >380

Explosion limits (kg/m³)

Lower: 0.020 (for polymer dust < 63 µm)

Min. ignition energy at 20°C (mJ)

Density, mass at 20°C (kg/m³): 905 (ISO1183)

Solubility in water (%weight): insoluble

Viscosity (mm²/s): non-applicable

10. Stability and Reactivity

Stability

Stable under normal operating conditions of storage.

Conditions to avoid

Avoid contact with strong oxidising materials and fluorine also avoid proximity or contact with flames sparks and do not heat to temperatures exceeding 300 °C

11. Toxicological Information

Acute toxicity Symptoms related to Inhalation: low risk for temperatures below 40°C. If heated to more than 235°C, the product may form vapours or fumes that may cause irritation of respiratory tract and cause coughing and sensation of shortness of breath.

Skin contact: no risk for temperatures below 40°C. In contact with hot material may cause severe thermal burns.

Eye contact: splashing of molten droplets causes ocular tissue injury.

Ingestion: minimal toxicity.

Carcinogenicity (mg/kg) IARC (International Agency on Research on Cancer): category 3 the agent is not classifiable as to its carcinogenicity to humans.

Mutagenicity: this product has been found to be non-mutagenic or non-genotoxic in the following in-vitro assays: mouse lymphoma assays, Chinese hamster ovary cell chromosome aberration test, and unscheduled DNA synthesis in rat hepatocytes.

Other: polyolefins are biologically inert.

12. Ecological Information

Information on ecological effects: avoid losses to the environment whenever possible.

Mobility

Air: there is a slow loss by evaporation

Soil: because of its physicochemical properties, the product generally has low soil mobility

Water: because of its low solubility the product should not be dangerous for aquatic life.

Persistence and degradability: persistent in the environment

Biodegradation: this substance is slowly biodegradable

accumulative potential: potential bioaccumulation of the product in environment is very low

Bio Ecotoxicity: because of its low solubility, the product should not be dangerous for aquatic life.

13. Disposal Considerations

Disposal: according to local regulations. Do not dispose of by means of sinks, drains or into the immediate environment. It may be used as fuel in suitably designed installations

14. Transportation Information

No restriction on transport by road, waters, rail or flight

15. Regulations

Not classified according to EEC directives 67/548/EEC (dangerous substances) and 1999/45/EC (dangerous preparations)

16. Other

No other information

IMPORTANT.

The information in this Data Sheet applies only to the products produced or supplied by us.

It is based on our experience and on the data available to us at the time of its issue and is accurate to the best of our knowledge. The customer is strongly advised to observe and ensure that its employees and customers observe all directions contained herein.

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