

## Safety Data Sheet according to VO 1907/2006/EC

Product Name: iglidur® I180-PF Status: 14 April 2014 Page: 1/4

#### 1 Description of the material / product and company

Description of the material or product: iglidur® I180-PF

Use of the material or product: Plastic Filament resp. Moulded plastic parts

Description of the company: igus® GmbH

Spicher Str. 1a D-51147 Cologne 02203/9649-0

Telephone: 02203/9649-0 Fax: 02203/9649-222 Emergency call (Poison Information Centre North): 0551/19240

#### 2. Possible risks

Noxious gases or dusts may form in the event of a fire and during thermal or mechanical processing, see Point 10. These can cause irritation of eyes, nose, throat and the respiratory tracts. The product will burn when exposed to fire. Please call the Poison Information Centre North (see Point 1) in emergencies. The product does not require labelling.

The thermal decomposition products of fluorinated polymers can cause polymer fume fever with flulike symptoms in humans, especially following smoking of contaminated tobacco products. Vapours, gases and dusts, which are released in case of high processing temperatures, can lead to an irritation of eyes, nose, throat and the respiratory tracts. In case of over-exposure nausea and headaches can occur.

#### 3 Composition / information about components

Product based on a thermoplastic polymer mixture with additives and fillers.

#### 4. First-aid measures

Inhalation: After inhaling decomposition products, move affected persons into the open air and let them rest. Call a medical doctor in case of complaints.

Skin contact: Mechanical effects may lead to irritation or injuries. In case of contact with the hot melt immediately cool with much water; do not peel off product from skin. Burns caused by molten granulate must be treated in the hospital.

Eye contact: Mechanical effects may lead to irritation or injuries. Rinse for at least 15 minutes with clean water or eye solution while keeping the eyelids pulled open. Seek immediate medical attention if complaints persist.

Ingestion: Rinse mouth, drink a lot of water and call a medical doctor and show this safety data sheet. If victim is unconscious, never administer water.

#### **5 Fire-fighting measures**

Suitable fire-extinguishing agents: Sprayed water jet, foam, fire extinguishing powder, carbon dioxide.

Unsuitable fire-extinguishing agents: Water with full jet.

Use a breathing apparatus that is independent of the environmental air. Dangerous combustion gases; see Point 10. Under certain fire conditions, traces of other toxic substances cannot be ruled out. The emergence of further decomposition and oxidation products depends on the fire conditions.

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Adapt fire-fighting measures to surrounding fire. Do not inhale fumes.

Dispose of contaminated fire fighting water and fire residues in accordance with official regulations.

#### 6 Measures after unintentional release

Personal precautions: Remove mechanically to prevent risk of slipping.

Environmental protection measures: Do not allow to penetrate soil, water or canalisation.

Cleaning instructions: To clean the fine dust an industrial vacuum cleaner must be used. Avoid the formation of dust.

#### 7 Handling and storage

Notes for safe handling: Machining or thermal processing require good ventilation or extraction systems at the processing machines. Inhalation of vapours, contact with open fire or the formation of dust must absolutely be avoided.

General hygiene measures for the use of chemicals must be adhered to. Eating, drinking and smoking in the work room are prohibited. Do not store food. Avoid dust formation.

Special storage conditions: Store in a cool and dry place. Do not store in passageways or staircases. Keep clear from sources of ignition. The product is combustible. Do not store together with strong acids and oxidizing agents.

Take measures against electrostatic charging.

Storage class according to VCI: (11) Flammable solids.

#### 8 Limitation and monitoring of exposure / personal protective equipment

No personal protective measures are required during appropriate use and application. Wash hands after use, in particular before eating, drinking or smoking. Appropriate ventilation respectively local extraction must be provided if the product is heated.

#### 9 Physical and chemical properties

Commercial form: Plastic Filament resp. Moulded plastic part

Colour White

Flash point:

Ignition temperature:

Self-igniting solid:

Fire-enhancing properties:

Density:

Solubility in water:

Not determined

Not determined

Not determined

Not determined

Not determined

Insoluble

#### 10 Stability and reactivity

No decomposition during appropriate use. To avoid thermal decomposition do not overheat.

The thermal decomposition of the product starts at 300°C.

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Hazardous fumes: Carbon monoxide, carbon dioxide, monomers, acrylonitrile, styrene, alphamethylstyrene, aliphatic and aromatic hydrocarbons, phenol, chlorine benzene, butylphenol, low molecular weight organic compounds, aldehydes and acids, ammonia and hydrocyanic acid, hydrogen fluoride, perfluoroisobutylene, carbonyl fluoride and other toxic vapours, gases or particles.

#### 11 Toxicological information

The product does, to the best of our knowledge, not have any noxious effects when it is appropriately handled and used.

Do not heat moulded plastic part to temperatures above 90°C. Only use plastic filament for a single melting procedure according to processing instructions.

Notes for safe handling: Machining requires good ventilation or extraction systems at the processing machines. Formation of dust must absolutely be avoided.

#### 12 Environmental relevant information

**Migration behaviour and behaviour in the ecosystem:** The product is a solid polymer that is insoluble in water and is not expected to have any disadvantageous effects on plants, animals or micro-organisms. It should nevertheless not be allowed to penetrate into the ground water, bodies of water or the drainage system.

**Persistence and degradation:** The substance is not biodegradable.

**Behaviour in waste water treatment plants:** Effects at the biological cleaning stage are not to be expected.

#### 13 Disposal information

The product can be incinerated in an approved plant in compliance with technical guidelines or stored together with domestic waste in an appropriate landfill site. Hydrogen fluoride must be removed by flue gas scrubbing.

Waste name: Fluorine-containing plastic waste.

EC Waste key number: The waste key depends on the intended purpose of the product.

#### 14 Transport information

Not deemed to be hazardous goods according to the transport regulations (GGVS/ADR, GGVE/RID, GGVBinSch/ADNR, GGVSee/IMDG Code, ICAO-Ti/IATA-DGR). Sending by mail is permitted.

#### 15 Information concerning legal regulations

Not subject to labelling according to EU directives. Water hazard class: nwg - not hazardous to water

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#### 16 Other information

The information provided above is based on the current state of our knowledge and does not guarantee any properties. The receiver is responsible for compliance with existing laws and regulations.

This document is not subject to a change service.

This is to certify that the above translation from German into English is complete and correct.

Königswinter, 16 April 2014

Sabine Bartsch Authorized translator for the Higher Regional Court of Cologne, Germany