

# Safety Data Sheet according to (EG) 1907/2006\*

## Trade Name: FRIALEN®, FRIAFIT® - Safety Fittings

\*Issue: 01-2011

revised: 05.01.2021

print date: 20.01.2021

<b>1. Description of company, materials and preparation</b>	
Trade description	FRIALEN / FRIAFIT safety fittings
Product type	Connection systems for gas, water, sewage and industrial pipe systems made from HD-PE and PE-Xa Please refer to the technical documents for further, detailed information.
Composition	<ul style="list-style-type: none"> <li>- low pressure polyethylene</li> <li>- metals</li> <li>- elastomers, alternatively in small amounts</li> <li>- sealing agents, alternatively in smallest amounts</li> <li>- lubricants, alternatively in smallest amounts</li> <li>- POM, alternatively in small amounts</li> </ul>
RESPONSIBLE FOR THE CONTENT	
Name of Company	Aliaxis Deutschland GmbH
<b>2. Composition / Specification of components</b>	
Polyethylene	<p>Olefin Polymer</p> <p>The product is a polymer which does not need to be registered with EINECS (European Inventory of Existing Commercial Chemical Substances) according to guidelines in chemical law.</p>
Metals	Alternatives: iron, copper, aluminium, brass, gunmetal, stainless steel, cast zinc
Elastomeres	Elastic sealing agents, suited to drinking water
Sealing agents / adhesives	Adhesive agents in smallest amounts, hardened
Lubricants	Traces of grease, suited to drinking water
POM	Polyoximethylene in small amounts
Harmful components	None to our knowledge
<b>3. Potential Dangers</b>	
Specific dangers	None to our knowledge
Symptoms caused by inhalation	Above 235°C it is possible that smoke/steam may lead to irritation, cough or shortness of breath.
Symptoms caused by skin contact	Contact with the hot product can cause severe burns.
Effects on the environment	<p>Due to its structure the product does not impose any danger on waterways.</p> <p>Not biodegradable.</p>
Harmful physical-chemical effects	inflammable

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<b>4. First Aid Measures</b>	
Solutions following inhalation	Take affected people outside following the effects of aerosol, smoke or steam of heated or burning products. Consult doctor if unwell.
following skin contact	Cool areas burnt by splashes of the hot, liquid product in water for 10 – 15 minutes Do not remove deposits of the hardened product from skin. If burns are severe, the injured person needs to be sent to hospital immediately.
following eye contact	If splashes of hot, liquid product have affected the eye, cool eyes with water immediately. The injured person needs to go to hospital immediately.
<b>5. Fire fighting Measures</b>	
Fire Grade	A
Technical Measures	Remove all flammable material from the danger zone. Call fire brigade immediately. Remove bystanders from the danger zone. The fire brigade needs to be equipped with protective suits and breathing apparatus.
Suitable extinguishing substances	Water, foam, dry extinguishing substances, carbon dioxide. In the event of a fire, neighbouring plants must be cooled using foam or water.
Unsuitable substances	None known.
Dangers	In the event of a fire: where there is added oxygen: carbon dioxide (CO <sub>2</sub> ) and water vapour; where there is lack of oxygen mainly: carbon monoxide (CO), soot and crack products: aldehyde, ketones, hydrocarbon and volatile fatty acids
Protective measures	Breathing apparatus which resistant to the ambient air must be worn if there is a great deal of smoke or steam
<b>6. Measures on accident release</b>	not applicable
<b>7. Handling and Storage</b>	
Handling	Refer to assembly instructions
Storage	In original packaging (cardboard boxes / plastic bags) up to 50° C ambient temperature. Store in enclosed rooms, dry without direct sunshine. Do not store near easily flammable materials. Do not store near radiators.

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Storage of pallets	<p>If the ground permits, two pallets may be stored on top of one another if all safety rules have been observed.</p> <p>NB: place heavy pallets at the bottom, light ones at the top.</p> <p>Note: by pallet is meant the actual pallet including the load.</p> <p>Before placing pallets in/on shelves check that the pallets will fit in/on shelves.</p> <p>The product is designed to be stored and does not require any additional preservation measures.</p>
VbF – hazard grade	Not applicable
Use:	Refer to price lists, article lists, technical documents.
<b>8. Exhibition limit and personal protective equipment</b>	
Exhibition limit	Not applicable
TA-AIR KL. I (%)	
Limit and supervision of environmental exhibition	Not applicable / does not need to be marked
<b>9. Physical and chemical specifications</b>	
Physical state at 20° C	Solid
Colour	Black dye (approx. 2% soot)
Odour	Odourless
<b>Important indications for the protection of personal health and the environment as well as safety</b>	
Polyethylene:	
Change of consistency at 1013 hPa	
Melting range (°C) *	From 110 to 160
Point of ignition (ASTM D 1929) (°C)	+ - 340
Temperature of self ignition (°C) *	> 320
Lower explosion values (kg/m3)	0.015 mm
Minimum ignition energy at 20° C 9MJ)	63
Steam pressure at 20° C (hPa)	None
Density at 20°C (kg/m3)	From 910 to 990 (ISO 1183)
Solubility in water at 20°C (mJ)	Not soluble
pH value (concentrated product)	Not applicable

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<b>10. Stability and Reactivity</b>	
Stability	Stable under normal conditions (during storage, handling and use)
<b>CONDITIONS TO BE AVOIDED</b>	Avoid contact with strong oxidation agents and fluoride. Avoid open flames and other sources of ignition. Do not store in direct sunlight. Do not store without plastic bag / cardboard box.
<b>11. Indications regarding toxicology</b>	
Acute toxicity	Polyolefins are biologically inert
Inhaling	Local toxic effects Above 235°C smoke/steam can cause breathing irritations, cough or shortness of breath.
Skin contact	<b>Due to its composition, it is unlikely this product will cause irritation</b> Contact with hot product can cause serious burns. Products which result from thermal disintegration may cause irritation at increased temperatures.
Eye contact	<b>Due to its composition, it is unlikely this product will cause irritation.</b> <b>Splashes of the molten product may lead to burning in the eyes.</b> Products which result from thermal disintegration may cause irritation at increased temperatures.
<b>SPECIAL EFFECTS</b>	<b>Components are largely biologically inert.</b> When working with this product it is not necessary to take any preventative medical measures.
<b>12. Indications regarding Ecology</b>	
Indications regarding ecology	Observe principles of industrial hygiene, do not allow to reach the environment without being controlled.
<b>Persistence and Degradability</b>	
Biodegradability	The product will biodegrade only very slowly.
BSB 5 (gO <sub>2</sub> /g)	Below detectable limit
<b>Ecotoxicity</b>	Based on the structure it is unlikely that this product poses any danger to our waterways.
Indications regarding ecology	Observe principles of industrial hygiene, do not allow to reach the environment without being controlled.

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<b>13. Indications for disposal</b>	
Waste disposal	Observe local legal advice when disposing. The product must be recycled or disposed of in line with waste regulations and cycle waste management. The product can be recycled as residue. The product can be incinerated in plants which have been authorised in line with the federal emission protection law. The product can be deposited in line with regulations.
Waste code – EG No.	07 02 13, 16 01 19, 17 02 03m 20 01 39 and 20 01 06 plastics
API (Association of Plastic Industry) Code	2 HD-PE: low pressure polyethylene
<b>14. Indications regarding Transport</b>	
<b>GGVS (ADR) / GGVE (RID)</b>	Non-hazardous goods
UN Number	Not applicable
<b>GGV See (IMO-IMDG)</b>	Non-hazardous goods
<b>ICAO / IATA air traffic</b>	Non-hazardous goods
<b>15. Regulations</b>	
Marking and EG categorisation	
EG Symbol(s)	Non hazardous material according to hazardous material legislation and guidelines 67/548/EWG (hazardous materials) and 1999/45/EG (dangerous preparations).
Product registrations Germany	Corresponds to the standard valid DVGW authorisation and registration conditions for gas/water
Endangering waterways grade	NWG: does not endanger waterways. Categorisation according to the general administration regulation regarding water services law with regards to the categorisation of hazardous materials into water endangering grades (VwVwS)

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<p>Polymer Registration</p>	<p>The main component of the product is a polymer. According to the regulation of the chemical law it does not need to be registered in the EINECS (European Inventory of Existing Commercial Substances).</p> <p>Registered in the US toxic substances register TSCA (Toxic Substances Control Act).</p> <p>Registered in the Canadian hazardous substances register DSL (Domestic Substances List).</p> <p>Registered in the Japanese hazardous substances register (Existing &amp; New Chemical Substances) No. 6-1.</p> <p>Registered in the Australian hazardous substances register AICS (The Australian Inventory of Chemical Substances).</p> <p>Registered in the Korean hazardous substances register ECL (Existing Chemical List). Serial No: KE-28877.</p> <p>Registered in the Philippine hazardous substances register PICCS (Philippine Inventory of Chemicals and Chemical Substances).</p> <p>Registered in the Swiss hazardous substances register (IGS toxins list) No: G-9232 BAG T-No: no need to be marked</p>
<p>Registration of other components:</p>	<p>Individual registration not required.</p>

This data sheet applies solely to FRIALEN/FRIAFIT safety fittings supplied, according to the specification by Aliaxis Deutschland GmbH.

The information contained in this data sheet is published in good faith and is based on the latest knowledge at the time of printing. Individual indications are being reviewed.

The user is pointed to the potential risks when using the products in a different way from original specification. This data sheet must be used and photocopied only for reasons of prevention and safety. The list of legislation, regulations and administrative guidelines should not be regarded as complete. The recipient of the products needs to look at all the official texts regarding use, storage and handling of the product, for which he is solely responsible.

The user of the product is obliged to hand over to all persons who are involved in any way with this product (e.g. use, storage, different applications) all necessary information for work safety, environmental and personal protection as set down in this datasheet.

(\*) changes from previous version.