



**SAFETY DATA SHEET**  
ACCORDING TO EC-REGULATIONS 91/155/EEC, 2006/1907/EC and 2006/121/EC

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Identification of the substance or preparation:** **VICTREX® 450FE compounds, with PTFE content as indicated by the grade name**  
**Company Identification:** Victrex Plc, Victrex Technology Centre, Hillhouse International, Thornton-Cleveleys, Lancs, FY5 4QD, UK  
**Telephone:** ++ 44 (0) 1253 897700  
**Fax:** ++ 44 (0) 1253 897701  
**Emergency Phone No.** ++ 44 (0) 1253 897754  
**Use of Substance / Preparation:** The materials are generally used for injection moulding and extrusion operations.  
This material is not for human implantation.

**2. HAZARDS IDENTIFICATION**

**EC Classification** Preparation is not classified as hazardous in the sense of directive 1999/45/EC and 2006/121/EC.

Product will burn in fire. A potential health hazard of this composition is the inhalation of thermal decomposition products from PTFE. Contamination of tobacco products MUST be avoided.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Preparation consisting of:**  
Polyetheretherketone (CAS No. 31694-16-3), Polytetrafluoroethylene (CAS No. 9002-84-0)

HAZARDOUS INGREDIENT(S)	%W/W	CAS No.	EC No.	EC Classification
None.	-	-	-	-

For full text of R phrases see section 16.

**4. FIRST AID MEASURES**



**4.1 Inhalation** Remove patient from exposure. Keep patient at rest and give oxygen if breathing difficult. If symptoms develop, obtain medical attention.

- 4.2 Skin Contact** After contact with skin, wash immediately with plenty of soap and water.  
**In the event of contact with molten product:** Cool affected area quickly with water. Do not attempt to remove hardened product. Obtain medical attention.
- 4.3 Eye Contact** Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. If symptoms persist, obtain medical attention.
- 4.4 Ingestion** May cause headache, nausea and vomiting. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
- 4.5 Further Medical Treatment** Unlikely to be required but if necessary treat symptomatically.
- 4.6 Special resources necessary for first aid** No data.

## 5. FIRE-FIGHTING MEASURES

- 5.1 Extinguishing Media** As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.
- 5.2 Unsuitable Extinguishing Media** None known.
- 5.3 Fire Fighting Protective Equipment** Protective respirator with independent air supply. Full protection, if necessary.
- 5.4 Special exposure hazards arising from the substance or preparation itself, combustion product, resulting gases.** In case of fire the following can develop: Oxides of carbon. Dust is ignitable but will not sustain combustion. A high temperature source of ignition is required. Insensitive to sparks. The minimum spark energy required for ignition of a dust cloud is greater than 5000 mJ. It will not train fire, e.g. along beams etc.
- 5.5 Other** Dispose of contaminated extinction water according to official regulations.

## 6. ACCIDENTAL RELEASE MEASURES

Refer to Section 13 and for personal protection refer to section 8

- 6.1 Personal Precautions** Avoid inhalation and contact with eyes or skin. Ensure sufficient supply of air. Avoid build up of dust. Remove possible cause of ignition – do not smoke. Take precautionary measures against static discharges.
- 6.2 Environmental Exposure Controls** Avoid release to the environment. Prevent surface and ground water infiltration, as well as ground penetration.
- 6.3 Methods for cleaning up** Collect mechanically and dispose of according to Section 13. Avoid build up of dust.

## 7. HANDLING AND STORAGE

- 7.1 HANDLING** See Section: 6.1. General hygiene measures for the handling of chemicals are applicable. Eating, drinking, smoking, as well as food storage, is prohibited in work room. Avoid build up of dust. Local Exhaust Ventilation at the workplace or on the processing machines required. Note: Danger of explosive dust
- Machine Cleaning (purging):** Purging with other polymers (e.g Polyethylene) at high temperatures can be hazardous. They may emit decomposition fumes which contain oxides of carbon and irritants. Auto ignition may also occur. Local exhaust ventilation is required. The relevant Safety Data Sheet for the purge material to be used should be consulted. Additional information can be obtained from the Victrex website [www.victrex.com](http://www.victrex.com)
- 7.2 STORAGE** Requirements for storage rooms and containers:  
 Not to be stored in gangways or stair wells. Store products enclosed, in original packing.  
 Special storage conditions: See Section: 10.2. Store in dry place.  
**Storage Temperature:** Ambient.  
**Storage Life:** Stable at ambient temperatures.  
**Specific use:** Industrial use only.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ensure adequate ventilation. This can be achieved by local exhaust ventilation or general ventilation. If this is insufficient to maintain the concentration under the WEL or TRGS 900 values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

### OCCUPATIONAL EXPOSURE LIMITS

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note:
Dust. (general dust limit value)	-		10			Inhalable Dust.
			4			Respirable Dust.
Fibre dust inorganic			2 fibres/ml,			

			5 mg/m3		
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WEL: Workplace Exposure Limit (UK HSE EH40)



**8.1 Respirators**

If above exposure limits are likely to be exceeded, breathing mask with fine dust filter (EN 143)



**8.2 Eye Protection**

Eye protection with side protection (EN 166)



**8.3 Gloves**

Impervious Gloves. Plastic or synthetic rubber gloves.  
Additional information on hand protection – No tests have been performed.  
When dealing with heated material: Insulating gloves EN 407 (heat).

**8.4 Other**

Protective working garments (e.g. safety shoes EN 344, long sleeved protective working garments).

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	Solid. (Granulate)
<b>Colour</b>	Grey./Brown.
<b>Odour</b>	Odourless.
<b>pH (Value)</b>	Not known.
<b>Boiling Point (°C)</b>	Not known.
<b>Melting Point (°C)</b>	343
<b>Flash Point (°C)</b>	Not known.
<b>Auto Ignition Temperature (°C)</b>	595
<b>Explosive Properties</b>	May form explosible dust clouds in air.
<b>Oxidising Properties</b>	Not applicable.
<b>Vapour Pressure (Pascal)</b>	Not known.
<b>Density (g/ml)</b>	FE20~1.4
<b>Solubility (Water)</b>	Insoluble.

**10. STABILITY AND REACTIVITY**

<b>10.1 Conditions to avoid</b>	See Section: 7. Stable when handled and stored correctly. Electrostatic charge. Open flame, ignition sources. Decomposes at temperatures above (°C): 450.
<b>10.2 Materials to avoid</b>	See Section: 7. Concentrated Sulphuric acid.
<b>10.3 Hazardous Decomposition Product(s)</b>	See Section: 5.4

**11. TOXICOLOGICAL INFORMATION**

The following information is based on a consideration of the properties of the main components of this mixture.	
<b>11.1 Ingestion</b>	Predicted to be low toxicity under normal conditions of handling and use.
<b>11.2 Inhalation</b>	Mechanical irritation of the respiratory tract.
<b>11.3 Skin Contact</b>	Repeated and/or prolonged skin contact may cause irritation. In the event of contact with molten product: Thermal Burns (molten polymer will adhere to skin and cause severe burns).
<b>11.4 Eye Contact</b>	No data. Dust may have irritant effect on eyes. Permanent damage is unlikely.
<b>11.5 Long Term Exposure</b>	Chronic effects are unlikely.

**12. ECOLOGICAL INFORMATION**

<b>12.1 Environmental Fate and Distribution</b>	Insoluble in water. The product has low mobility in soil.
<b>12.2 Persistence and Degradation</b>	The product is not biodegradable.
<b>12.3 Toxicity</b>	Low toxicity to aquatic organisms.
<b>12.4 Effect on Effluent Treatment</b>	Unlikely to affect biological treatment processes.
<b>12.5 Water hazard class:</b>	Not classified.

**13. DISPOSAL CONSIDERATIONS**

<b>13.1 Regulatory information</b>	Do not allow to enter drains, sewers or watercourses. Disposal should be in accordance with local, state or national legislation.
<b>13.2 E.C disposal code no:</b>	Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. The waste codes are recommendations based on the scheduled use of this product. For alternative uses and applications, other waste codes may be allocated under certain circumstances.

## VICTREX® 450FE compounds, with PTFE content as indicated by the grade name

07 02 13- waste plastic 07 02 99- waste not otherwise specified.  
13.3 Recommended: Containers must be decontaminated in accordance with all applicable regulations.

### 14. TRANSPORT INFORMATION

#### International Transport Regulations

Not classified as dangerous for transport.

<b>UN No.:</b>	Not applicable.
<b>Road/Rail Transportation (ADR/RID):</b>	Not applicable.
<b>Class/Packing Group:</b>	Not applicable.
<b>Classification code:</b>	Not applicable.
<b>LQ:</b>	Not applicable.
<b>EmS:</b>	Not applicable.

### 15. REGULATORY INFORMATION

Classification according to Dangerous Product Regulations incl. EC Directives 67/548/EEC, 1999/45/EC and 2006/121/EC.

<b>EC Classification</b>	Not classified as dangerous for supply/use.
<b>Hazard Symbol</b>	Not applicable.
<b>Risk Phrases</b>	Not applicable.
<b>Safety Phrases</b>	Not applicable.
<b>Observe restrictions</b>	VOC 1999/13/EC

#### INTERNATIONAL INVENTORIES

<b>EINECS (Europe)</b>	EINECS: Included.
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### 16. OTHER INFORMATION

Manufactured in the UK under a Quality System approved to ISO 9001:2000 by Victrex Plc.  
This Safety Data Sheet was prepared in accordance with Directive 2001/58/EC.  
The following sections contain revisions or new statements: 1 - 16

#### GLOSSARY

WEL: Workplace Exposure Limit (UK HSE EH40) / Bmgv: Biological monitoring guidance value (UK HSE EH40) / EH40 – UK Occupational Exposure Limits.

Additional information can be obtained from the Victrex website [www.victrex.com](http://www.victrex.com) Additional information on the properties, processing and application of VICTREX polymers is available at [www.victrex.com](http://www.victrex.com).  
These details refer to the product as it is delivered.

The statements made here should describe the product with regard to the necessary safety precautions – they are not meant to guarantee definite characteristics – but they are based on our present up-to-date knowledge.