VICTREX® SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH) & 1272/2008 (CLP)

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product identifier	
	Trade name	VICTREX® 150FC and 450FC
		compounds, with combined Carbon
		Fibre, Graphite and PTFE content as
		indicated by the grade namePowder:
	CAS No.	Polyaryletherketone31694-16-3 or 29658-26-2Synthetic Graphite7782-42-5Carbon fibres7440-44-0Deleteratives the lange00000-04-0
	EINECS No.	Polytetrafluoroethylene90002-84-0PolyaryletherketoneNot availableSynthetic Graphite231-955-3Carbon fibres231-153-3PolytetrafluoroethyleneNot available
	REACH Registration No.	Not available
1.2	Relevant identified uses of the substance or	
	mixture and uses advised against	
	Identified use(s)	The materials are generally used for injection moulding and extrusion operations.
	Uses advised against	This material is not for human implantation.
1.3	Details of the supplier of the safety data sheet	·
	Company Identification	Victrex plc, Victrex Technology Centre, Hillhouse International, Thornton-Cleveleys Lancs, UK FY5 4QD
	Telephone	++ 44 (0) 1253 897700
	Fax:	++ 44 (0) 1253 897701
	E-Mail (competent person)	sds@victrex.com
1.4	Emergency telephone number	
	Emergency Phone No.	++ 44 (0) 1253 897754
SEC	TION 2: HAZARDS IDENTIFICATION	

2.1	Classification of the substance or mixture	
	Preparation is not classified as hazardous in the	sense of directive 1999/45/EC and 2006/121/EC.
2.1.1	Regulation (EC) No. 1272/2008 (CLP).	Not classified as dangerous for supply/use.
2.1.2	Directive 67/548/EEC & Directive 1999/45/EC	Not classified as dangerous for supply/use.
2.2	Label elements	None.



2.3 Other hazards

2.4 **Additional Information** 

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

EC Classification No. 1272/2008

Hazardous ingredient(s)	%W/W	EC No.	REACH Registration No.	Hazard statement(s)
None.	-	-	-	-

None.

## EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	EC No.	REACH Registration No.	EC Classification and Risk Phrases
None.	-	-	-	-

#### **3.2 Additional Information**

For full text of H/P phrases see section 16.

# **SECTION 4: FIRST AID MEASURES**



4.1	Description of first aid measures	
	Inhalation	Remove patient from exposure. Keep patient at rest and give oxygen if breathing difficult. If symptoms develop, obtain medical attention.
	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.
	Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open.
	Ingestion	May cause headache, nausea and vomiting. Call a physician (or poison control centre immediately).Do not induce vomiting wash out mouth with water. Call a physician (or poison control centre immediately).
4.2	Most important symptoms and effects, both acute and delayed	Unlikely to be required but if necessary treat symptomatically.
4.3	Indication of any immediate medical attention and special treatment needed	Unlikely to be required but if necessary treat symptomatically.



# **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1 Extinguishing media

5.3

Suitable Extinguishing Media

Advice for fire-fighters

Unsuitable Extinguishing Media

5.2 Special hazards arising from the substance or mixture Extinguish with carbon dioxide, dry chemical, foam or waterspray. None.

In case of fire the following can develop: When glowing and during combustion, CO/CO2 is generated as well as the potential for the release of degradation products such as Hydrogen Fluoride, Tetrafluoroethylene, Hexafluropropylene, Perfluoroisobutylene and Carbonyl Fluoride. A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. 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.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

- 6.1 Personal precautions, protective equipment Avoid inhalation and contact with eyes or skin. Ensure and emergency procedures sufficient supply of air. Avoid build up of dust.Remove possible cause of ignition - do not smoke. Take precautionary measures against static discharge. Avoid release to the environment.Prevent surface and 6.2 Environmental precautions ground water infiltration, as well as ground penetration. 6.3 Methods and material for containment and Sweep up carefully with non-sparking tools. Transfer to a cleaning up lidded container for disposal or recovery. 6.4 Reference to other sections
- 6.5 Additional Information

# **SECTION 7: HANDLING AND STORAGE**

7.1 Precautions for safe handling

General hygiene measures for the handling of chemicals are applicable. This is particularly important due to the presence of PTFE. Observe directions on label and instructions for use. Avoid conditions where decomposition products may be formed.When using do not smoke.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

Contamination of tobacco products MUST be avoided. "Polymer Fume Fever" is particularly associated with the smoking of contaminated tobacco products. This condition is characterised by influenza-type symptoms occurring a few hours after exposure and lasting up to 48 hours.

PTFE begins to decompose very slowly above 260 °C and increases rapidly above 360 °C. Processing above these temperatures yields a range of high toxicity and corrosive products and therefore is not recommended without the use of LEV.



Machine Cleaning (purging):Purging with other polymers (e.g Polyethylene) at high temperatures can be hazardous. 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

7.2 Conditions for safe storage, including any incompatibilities
 Storage Temperature
 Storage Life
 Incompatible materials

7.3 Specific end use(s)

Store products enclosed, in original packing.

Store at room temperature. > 10 Year(s).

The materials are generally used for injection moulding and extrusion operations.

Local Exhaust Ventilation at the workplace or on the

Impervious Gloves. Plastic or synthetic rubber gloves Additional information on hand protection – No tests have

When dealing with heated material: Insulating gloves EN 407

If above exposure limits are likely to be exceeded, breathing

Eye protection with side protection (EN 166)

processing machines required.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

- 8.1 Control parameters
- 8.1.1 Occupational exposure limits

None

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

None

Not available.

- 8.1.2 Biological limit value
- 8.1.3 PNECs and DNELs
- 8.2 Exposure controls
- 8.2.1 Appropriate engineering controls
- 8.2.2 Personal protection equipment Eye/face protection



Skin protection (Hand protection/ Other)



Respiratory protection



8.2.3 Environmental Exposure Controls

No special requirements.

mask with fine dust filter (EN 143)

been performed.

(heat)



# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Appearance Colour. Odour Odour threshold (ppm) pH (Value) Melting point (°C) / Freezing point (°C) Boiling point/boiling range (°C): Flash point (°C) Evaporation rate Flammability (solid, gas) Explosive limit ranges Vapour pressure (Pascal) Vapour density (Air=1) Bulk Density (g/ml) Solubility (Water) Solubility (Other) Partition coefficient (n-Octanol/water) Auto ignition point (℃) Decomposition temperature (°C) Viscosity (mPa. s) Explosive properties

Solid (Granulate) Black Odourless None Not applicable 343°C Not known. Not known. Not known. Solid, Non-flammable Not explosive. Not known. Not known FC 30 ~1.4 Insoluble Not known Not known 595°C > 450 ℃ Not known Not explosive, May form explosible dust clouds in air. Not oxidising None

Oxidising properties Other information

# SECTION 10: STABILITY AND REACTIVITY

# 10.1 Reactivity

9.2

11.1

- 10.2 Chemical stability
- 10.3 Possibility of hazardous reactions
- 10.4 Conditions to avoid
- 10.5 Incompatible materials
- 10.6 Hazardous Decomposition Product(s)

Stable under normal conditions. Stable under normal conditions. Stable under normal conditions. Stable under normal conditions. Concentrated Sulphuric acid When glowing and during combustion, CO/CO2 is generated as well as the potential for the release of degradation products such as Hydrogen Fluoride, Tetrafluoroethylene, Hexafluropropylene, Perfluoroisobutylene and Carbonyl Fluoride.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

Information on toxicological effects

11.1.1	Substances Acute toxicity	
	Ingestion	Predicted to be low toxicity under normal conditions of handling and use.
	Inhalation	Mechanical irritation of the respiratory tract.
	Skin Contact	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).
	Eye Contact	No data. Dust may have irritant effect on eyes. Permanent damage is unlikely.





		VICTICA
	Hazard label(s)	Not known
	Serious eye damage/irritation	Not known
	respiratory or skin sensitization	Not known
	Mutagenicity	Not known
	Carcinogenicity	Not known
	Reproductive toxicity	Not known
	STOT - single exposure	Not known
	STOT - repeated exposure	Not known
	Aspiration hazard	Not known
11.1.2	Mixtures	
		Not applicable
11.2	Other information	None

SECTION 12: ECOLOGICAL INFORMATION		
12.1	Toxicity	Low toxicity to aquatic organisms.
12.2	Persistence and degradability	Not readily biodegradable.
12.3 12.4	Bioaccumulative potential Mobility in soil	Not classified as PBT or vPvB. The product has low mobility in soil.The product has low mobility in sediment.
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None anticipated

# SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Disposal should be in accordance with local, state or national legislation.
13.2	Additional Information	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. 07 02 13- waste plastic, 07 02 99-waste not otherwise specified.

SEC	SECTION 14: TRANSPORT INFORMATION			
14.1	<b>Land transport (ADR/RID)</b> UN number Proper Shipping Name	Not classified as dangerous for transport. Not applicable Not applicable		
14.2	<b>Sea transport (IMDG)</b> UN number Proper Shipping Name	Not classified as dangerous for transport. Not applicable Not applicable		
14.3	<b>Air transport (ICAO/IATA)</b> UN number Proper Shipping Name	Not classified as dangerous for transport. Not applicable Not applicable		



14.4 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

SECTI	ON 15: REGULATORY INFORMATION	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Not classified as dangerous for supply/use.
15.1.1	EU regulations Authorisations and/or restrictions on use	None
15.1.2	National regulations	None
15.2	Chemical Safety Assessment	Not relevant for this material.

# **SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements: 1-16.

#### LEGEND

LEGEND	
LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
DNEL	Derived No Effect Level
PNEL	Predicted No Effect Concentration
References:	
	Workplace Exposure Limit (UK HSE EH40)
Risk Phrases and Safety Phrases	
	None
Hazard statement(s) and Precautionary statement(s)	
	None

Training advice:

www.victrex.com

#### **Additional Information**

Manufactured in the UK under a Quality System approved to ISO 9001:2008 by Victrex Plc.

Additional information on the properties, processing and application of VICTREX polymers is available at 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.

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