# 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™ PEEK Granules 150FC; 450FC and 650FC** |

**1.2 Other means of identification**

| | |
|---|---|
| CAS No. | PEEK Polymer (31694-16-3 or 29658-26-2) |
| EC No. | Not applicable**.** |
| REACH Registration No. | Not applicable**.** |

**1.3 Recommended use of the substance and restrictions on use**

| | |
|---|---|
| Identified use(s) | The materials are generally used for injection moulding and extrusion operations. |

**1.4 Details of the supplier of the safety data sheet**

**1.4.1 Manufacturer Details**

| | |
|---|---|
| Company Identification | Victrex Manufacturing Ltd.<br>Hillhouse International, Thornton-Cleveleys<br>Lancashire, UK - FY5 4QD |
| Telephone | + 44 (0) 1253 897700 |
| Fax: | + 44 (0) 1253 897701 |
| E-Mail (competent person) | RAPS@victrex.com |

**1.4.2 Only Representative details**

| | |
|---|---|
| Company Identification | Stewardship Chemicals 40,<br>Dlugosza 67,<br>43-188 Orzesze,<br>Poland |
| Telephone: | +48 501168430 |
| E-Mail (competent person) | pawelskiba@stewardshipsolutions.eu |

**1.4.3 Regional Importer Address** — See section 16 for regional importer / supplier information

**1.5 Emergency telephone number**

| | |
|---|---|
| Emergency Phone No. | + 44 (0) 1253 897754 - UK<br>+(49) 6192 964 900 - Europe<br>+(1) 484 342 6001 - USA<br>Hours of operation 09:00 – 17:00 (Monday – Friday) |

## SECTION 2: HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture**

**2.1.1 Regulation (EC) No. 1272/2008 (CLP).** Not classified as dangerous for supply/use.

**2.2 Label elements (GHS)** None.

Hazard pictogram(s) None.

Signal word(s) None.

Hazard statement(s) None.

Precautionary statement(s) None.

**2.3 Other hazards** Not classified as PBT or vPvB.

PEEK polymer does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

Not explosive, see section 9.2 below.

**2.4 Additional Information** None.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

This product does not contain any reportable hazardous materials
Composition is confidential. Based on Polyetheretherketone polymer - (CAS No. 29658-26-2 or 31694-16-3)
Contains Polytetrafluoroethylene (PTFE) polymer- (CAS No. 9002-84-0)

Classification according to Regulation EC No. 1272/2008 [CLP]:

| Hazardous ingredient(s) | %W/W | EC No. | CAS No. | REACH Registration No. | Hazard statement(s) |
|---|---|---|---|---|---|
| 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 victim to fresh air and keep at rest in a position comfortable for breathing.

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 2 minutes while holding eyelids open. |
| | Ingestion | Call a physician (or poison control centre immediately).Do not induce vomiting wash out mouth with water. |
| **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** | |
| | Suitable Extinguishing Media | In case of fire, use water spray, foam, dry powder or $CO_2$ for extinction. |
| | Unsuitable Extinguishing Media | None. |
| **5.2** | **Special hazards arising from the substance or mixture** | In case of fire the following can develop: Oxides of carbon. 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. |
| **5.3** | **Advice for fire-fighters** | 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. |
| **5.4** | **Other** | Dispose of contaminated extinction water according to official regulations. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| **6.1** | **Personal precautions, protective equipment and emergency procedures** | 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 discharge. |
| **6.2** | **Environmental precautions** | Avoid release to the environment. Prevent surface and ground water infiltration, as well as ground penetration. |
| **6.3** | **Methods and material for containment and cleaning up** | Sweep up carefully with non-sparking tools. Transfer to a lidded container for disposal or recovery. |
| **6.4** | **Reference to other sections** | None. |
| **6.5** | **Additional Information** | None. |

## 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 www.victrex.com

**7.2 Conditions for safe storage, including any incompatibilities**

Store products enclosed, in original packing.

| | |
|---|---|
| Storage Temperature | Store at room temperature. |
| Storage Life | > 10 Year(s). |
| Incompatible materials | None known |

**7.3 Specific end use(s)**

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

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

Ensure adequate ventilation.

**8.1.1 Occupational exposure limits**

None.

| SUBSTANCE. | CAS No. | LTEL (8 hr TWA ppm) | LTEL (8 hr TWA mg/m$^3$) | STEL (ppm) | STEL (mg/m$^3$) | Note: |
|---|---|---|---|---|---|---|
| Dust. (general dust limit value) | - | - | 10 | | | Inhalable Dust |
| | | | 4 | | | Respirable Dust. |

| | | |
|---|---|---|
| **8.1.2** | **Biological limit value** | None |
| **8.1.3** | **PNECs and DNELs** | Not available. |

**8.2 Exposure controls**

**8.2.1 Appropriate engineering controls**

Local Exhaust Ventilation at the workplace or on the processing machines required.

**8.2.2 Personal protection equipment**

Eye/face protection

Eye protection with side protection (EN 166)

Skin protection (Hand protection/ Other)

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)

Respiratory protection

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

**8.2.3 Environmental Exposure Controls**

No special requirements.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

| | |
|---|---|
| Appearance | Solid (Granulate) |
| Colour. | Black |
| Odour | Odourless |
| Odour threshold (ppm) | None |
| pH (Value) | Not applicable |
| Melting point (°C) | 343°C |
| Boiling point/boiling range (°C): | Not known. |
| Flash point (°C) | Not known. |
| Evaporation rate | Not known. |
| Flammability (solid, gas) | Solid , Non-flammable |
| Explosive limit ranges | Not explosive. |
| Vapour pressure (Pascal) | 39.6 (@107°C) |
| Vapour density (Air=1) | Not known |
| Bulk Density (g/ml) | ~1.4 |
| Solubility (Water) | Insoluble |
| Solubility (Other) | Insoluble |
| Partition coefficient (n-Octanol/water) | Not known |
| Auto ignition point (°C) | 595°C |
| Decomposition temperature (°C) | > 450°C |
| Viscosity (mPa. s) | Not known |
| Kinematic viscosity ($mm^2/s$) | Not applicable |

| | |
|---|---|
| Particle characteristics | Granule (pellets) dimensions:<br>Length 2.0 – 4.0mm; diameter 2.0 – 3.5mm<br>Micro (pellets) dimensions:<br>0.4mm-2.0mm |

No 'Nanoparticles' or 'Nanomaterial' substances (per the definition in EU Commission Recommendation 2022/3689/EU) have been generated in the manufacturing process, nor intentionally added to the Victrex grades detailed above.

**9.2 Other information**

**9.2.1 Information with regard to physical hazard classes**

| | |
|---|---|
| **Explosives** | Not explosive |

## SECTION 10: STABILITY AND REACTIVITY

| | | |
|---|---|---|
| **10.1** | **Reactivity** | Stable under normal conditions. |
| **10.2** | **Chemical stability** | Stable under normal conditions. |
| **10.3** | **Possibility of hazardous reactions** | Stable under normal conditions. |
| **10.4** | **Conditions to avoid** | Stable under normal conditions. Electrostatic charge. Open flame, ignition sources. Decomposes at temperatures above 450°C. |
| **10.5** | **Incompatible materials** | Concentrated Sulphuric acid |
| **10.6** | **Hazardous Decomposition Product(s)** | 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

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**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. |
| **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** | **Information on other hazards** | None |
| **11.2.1** | **Endocrine disrupting properties** | PEEK polymer does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher |
| **11.2.2** | **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** | **Bioaccumulative potential** | Not classified as PBT or vPvB. |
| **12.4** | **Mobility in soil** | 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** | **Endocrine disrupting properties** | PEEK polymer does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher |
| **12.7** | **Other adverse effects** | None anticipated |

## SECTION 13: DISPOSAL CONSIDERATIONS

| | | |
|---|---|---|
| **13.1** | **Waste treatment methods** | Disposal should be in accordance with local, regional, state or national legislation. |
| **13.2** | **Additional Information** | The European 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.<br>07 02 13- waste plastic, 07 02 99-waste not otherwise specified. |

## SECTION 14: TRANSPORT INFORMATION

| | | |
|---|---|---|
| **14.1** | **Land transport (ADR/RID)** | Not classified as dangerous for transport. |
| | UN number | Not applicable |
| | Proper Shipping Name | Not applicable |
| **14.2** | **Sea transport (IMDG)** | Not classified as dangerous for transport. |
| | UN number | Not applicable |

| | | |
|---|---|---|
| | Proper Shipping Name | Not applicable |
| **14.3** | **Air transport (ICAO/IATA)** | Not classified as dangerous for transport. |
| | UN number | Not applicable |
| | Proper Shipping Name | Not applicable |
| **14.4** | **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable |

## SECTION 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** | |
| | **USA** | |
| | TSCA – PEEK Polymer | Listed - ACTIVE |
| | OSHA | Not classified as a hazardous material under the criteria outlined in the OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). |
| | **China** | |
| | IECSC – PEEK Polymer | Listed |
| | China Hazardous Chemical Inventory 2015 | Not Listed |
| **15.2** | **Chemical Safety Assessment** | Not relevant for this material. |

## SECTION 16: OTHER INFORMATION

**The following sections contain revisions or new statements:** Updated in line with Regulation (EC) No. .

**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 by Victrex Manufacturing Ltd, under a Quality System approved to ISO 9001.

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.

**Regional Importer Addresses**

**Victrex USA, Inc.**
300 Conshohocken State Road
Suite 120
West Conshohocken
PA, 19428 USA
Tel: +(1) 484 342 6001

**Victrex Europa GmbH**
Langgasse 16
65719 Hofheim/Ts.
Germany
Tel: +(49) 6192 964900

**Victrex Japan Inc.**
Mita Kokusai Building Annex
1-4-28, Mita, Minato-ku
Tokyo
108-0073 Japan
Tel: +81 3 5427 4650

**Victrex High-performance Materials (Shanghai) Co.,Ltd.**
Part B Building G, No 1688,
Zhuanxing Road,
Xinzhuang Industry Park,
Shanghai 201108,
China
Tel: +86-21-6113 6900

**Victrex Hong Kong (Regional office)**
Room 2219
The Metropolis Tower
10 Metropolis Drive
Hunghom, Kowloon
Hong Kong
Special administrative region, PRC
Tel: +852 2366 1357

**Victrex Taiwan**
12F, No. 101,
Songren Rd.,
Xinyi District
Taipei City 110
Taiwan
Tel: +886-987118240

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Victrex Global Sites

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