
SECTION 1 – Identification of the substance/mixture and of the company

Product Name Vulcan PEI 1010
Chemical Name Polyetherimide 1010
Pure substance/mixture Mixture

Section 1.2 – Relevant identified uses of the substance or mixture and uses advised against

Application Additive Manufacturing
Used advised against Not identified.

Section 1.3 – Details of the supplier of the safety data sheet**Manufacturer**

Tectonic 3D B.V.
High Tech Campus 9
5656 AE Eindhoven
The Netherlands
Tel +31 (0) 408517575
<https://www.tectonic-3d.com/>

E-mail address info@tectonic-3d.com

Section 1.4 – Emergency telephone number**Europe**

Emergency telephone +31 (0) 408517575 (08.00-17.00 CET)

United Kingdom See above.

SECTION 2 - Hazards Identification Summary

GHS Remark

The additives in this product (if any) are bound in a thermoplastic resin matrix. In accordance with GHS for the classification of the product, the hazard potential may be assessed with respect to the physico-chemical form and/or bioavailability of the individual components in the thermoplastic resin. UN GHS says, that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions that no classification is indicated if the mechanism is not relevant to humans. Where GHS classifications are shown below, these are based on the individual components in the thermoplastic resin matrix. Under the typical use conditions for the resin, these hazardous components are unlikely to contribute to workplace exposure. Please read the entire safety data sheet and/or consult an EHS professional for a complete understanding.

Section 2.1 – Classification of the substance or mixture**Classification according to Regulation (EC) N0. 1272/2008 [CLP]**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

Classification according to Regulation (67/548/EEC, 1999/45/EC)

This mixture is classified as not hazardous according to regulation (67/548/EEC, 1999/45/EC)



Section 2.2 – Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

Symbols/Pictograms

Not applicable.

Signal word

None.

Hazard Statements

Not applicable.

Precautionary Statements

Not applicable.

Section 2.3 – Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 – Composition/information on ingredients

Section 3.1 – Substances

Not applicable

Section 3.2 – Mixtures

Chemical nature : Mixture

Hazardous components

No hazardous ingredients

SECTION 4 – First Aid Measures

Section 4.1 – Description of first aid measures

General Advice

:Thermal decomposition can lead to release of irritating gases and vapours. Move the victim to fresh air. Obtain medical attention.

Inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.

Skin Contact

:After contact with skin, wash immediately with plenty of cold water. Wash off immediately with soap and plenty of water. Consult a physician. If skin irritation persists, call a physician.

Eye Contact

:Immediately flush eye(s) with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, consult a specialist.

Ingestion

:Negligible or unlikely exposure pathways If accidentally swallowed obtain immediate medical attention. Get medical attention if symptoms occur and show SDS

Section 4.2 – Most important symptoms and affects, both acute and delayed

Inhalation

:Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.

Skin Contact

:After contact with skin, wash immediately with plenty of cold water. Wash off immediately with soap and plenty of water. Consult a physician. If skin irritation persists, call a physician.

Eye Contact

:Immediately flush eye(s) with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, consult a specialist.

Ingestion

Negligible or unlikely exposure pathways. If accidentally swallowed obtain immediate medical attention. Get medical attention if symptoms occur and show SDS.

Over-exposure signs/symptoms

None known

Section 4.3 – Indication of any immediate medical attention and special treatment needed

No information available

SECTION 5 – Firefighting Measures

Section 5.1 – Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Section 5.2 – Special hazards arising from the substance or mixture

Specific hazards during firefighting

Avoid generating dust; fine dust dispersed in air in sufficient

Firefighting concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Material is not sensitive to mechanical impact.

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments, hydrogen cyanide, nitrogen oxides. If present, certain hazardous additives can also liberate halogenated hydrocarbons.

Section 5.3 – Advice for firefighters

In the event of fire, Wear self-contained breathing apparatus for firefighting if necessary. Stay upwind/ keep distance from source.

Further information

Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air. Thermal decomposition can lead to release of irritating gases and vapors.

Explosive properties

Not applicable

Section 6 – Accidental Release Measures

Section 6.1 – Personal precautions, protective equipment and emergency procedures

Take precautionary measures against static discharges.

Section 6.2 – Environmental precautions

Do not flush into surface water or sanitary sewer system. Should not be released into the environment. SABIC is committed to implementing Responsible Care® and global sustainability programs (such as The Alliance to End Plastic Waste, Operation Clean Sweep®, etc.) throughout the value chain that are designed to prevent and address accidental releases into the environment. Accordingly, SABIC recommends implementation of systems and practices by downstream users to prevent and address incidental releases in order to protect the aquatic environment from potential (long-term) negative effects of plastic materials.

Section 6.3 – Methods and material for containment and cleaning

Methods for containment

No information available.

Methods for cleaning

Sweep up and shovel into suitable containers for disposal. Do not create a powder cloud by using a brush or compressed air.

Section 6.4 – Reference to other sections

For disposal considerations see section 13.

Section 7 – Handling and Storage

Section 7.1 – Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Provide for appropriate exhaust ventilation and dust collection at machinery. Avoid dust formation. All metal parts of the mixing and processing equipment must be earthed. Open containers only in well-ventilated area.

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Ensure good ventilation at the work station.

Section 7.2 – Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry and cool place. Keep away from heat and sources of ignition. Residual monomer vapors can accumulate in the headspace of closed containers.

Section 7.3 – Specific end use(s)

See the Technical data sheet (sTDs) for further information

Section 8 – Exposure Controls/Personal Protection

Section 8.1 – Control parameters

Contains no substances with occupational exposure limit values.

Section 8.2 – Exposure Controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Provide appropriate exhaust ventilation at machinery. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, ductwork, and other surfaces using appropriate personal protection.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) , Chemical resistant goggles must be worn.

Hand Protection

Wear protective gloves.

Skin and Body protection

Long sleeved clothing

Respiratory protection

Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapours. If dust or powder are produced from secondary operations such as sawing or grinding, use a respirator approved for protection from dust.

Protective measures

Wear suitable protective equipment.

Environmental exposure controls

No information available

Section 9 – Physical and Chemical Properties

Section 9.1 – Information on basic physical and chemical properties

Appearance	Filament
Color	Natural
Odor	None or Slight
Odor threshold	Not applicable



Property	Value	Remarks Method
PH		No information available
Melting point/ freezing point		This product does not exhibit a sharp melting point but softens gradually over a wide range of temperatures.
Boiling point / boiling range		Not determined
Flash point		Not determined
Evaporation rate		No information available
Flammability (solid, gas)		Not determined
Explosive limits		No information available
Upper explosive limits		Not applicable
Lower explosive limits		Not applicable
Vapor Pressure		Negligible
Vapor Density		Not determined
Relative Density		> 1
Water Solubility		Insoluble in water
Solubility(ies)		No information available
Partition Coefficient		No information available
Autoignition Temperature		No information available
Decomposition Temperature		No information available
Kinematic Viscosity		No information available
Dynamic Viscosity		No information available
Explosive properties		No information available
Oxidizing properties		No information available
Density		No information available
Bulk Density		500 kg/m ³

Section 9.2 – Other information

No information available

Section 10 – Stability and Reactivity

Section 10.1 – Reactivity

Stable under recommended storage conditions.

Section 10.2 – Chemical stability

Stable at normal ambient temperature and pressure. Hazardous polymerisation does not occur.

Section 10.3 – Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Section 10.4 – Conditions to avoid

To avoid thermal decomposition, do not overheat. Heating can release hazardous gases. Do not exceed melt temperature recommendations in product literature. Purging's of hot material should be collected in small, flat, thin shapes and quenched with water to allow for rapid cooling. Do not allow product to remain in barrel at elevated temperatures for extended periods of time.

Section 10.5 – Incompatible materials

No special restrictions on storage with other products.

Section 10.6 – Hazardous decomposition products

Process vapors under recommended processing conditions may include trace levels of, hydrocarbons, phenols, alkylphenols, diarylcarbonates

Section 11 – Toxicological Information

Section 11.1 – Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity

Remarks: > 5000 mg/kg (estimated)

Acute dermal toxicity

Remarks: > 2000 mg/kg (estimated)

Experience with human exposure

Inhalation

Remarks: Inhalation unlikely due to physical form. Processing fumes evolved at recommended conditions may contain trace amounts of hazardous chemicals. Extreme processing conditions or temperatures may result in higher levels. Processing vapours may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation duct work, molds, and other surfaces can cause irritation and injury to skin.

Skin contact

Remarks: Not a hazard during normal industrial use. If present, some additives (like glass fiber or flame retardants) may cause skin irritation in susceptible persons.

Eye contact

Remarks: Resin particles, like other inert materials, are mechanically irritating to eyes.

Ingestion

: Remarks: Ingestion unlikely due to physical form.

Further information

Product:

Special Studies: The toxicological data has been taken from products of similar composition.

Section 12 – Ecological Information

Section 12.1 – Ecotoxicity

No information available.



Section 12.2 – Persistence and degradability

No information available.

Section 12.3 – Bio accumulative potential

No information available.

Section 12.4 – Mobility in soil

No information available.

Section 12.5 – Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 12.6 – Other adverse effects

No information available.

Section 12.7 – Additional ecological information

Do not flush into surface water or sanitary sewer system. Based on the ecotoxicology studies conducted on fine particles/fibers in the sub-micron range, this material is not expected to be environmentally hazardous under normal use

Section 13 – Disposal Considerations

Section 13.1 – Waste treatment methods**Product**

Waste must be classified and labelled prior to recycling or disposal. Where possible recycling is preferred to disposal or incineration. SABIC is committed to implementing Responsible Care® and global sustainability programs (such as The Alliance to End Plastic Waste, Operation Clean Sweep®, etc.) throughout the value chain that are designed to prevent and address accidental releases into the environment. Accordingly, SABIC recommends implementation of systems and practices by downstream users to prevent and address incidental releases in order to protect the aquatic environment from potential (long-term) negative effects of plastic materials.

Contaminated packaging

Where possible recycling is preferred to disposal or incineration. Can be landfilled or incinerated, when in compliance with local regulations.

Other information

No information available.

Section 14 – Transport Information

14.1 UN Number	Not regulated as dangerous good.
14.2 UN Proper Shipping Name	Not regulated as dangerous good.
14.3 Transport Hazard Class(es)	Not regulated as dangerous good.
14.4 Packing Group	Not regulated as dangerous good.
14.5 Environmental Hazard	Not regulated as dangerous good.
14.6 Special Precautions For User	Remarks: Not classified as dangerous in the meaning of transport regulations.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable for product as supplied.

Section 15 – Regulatory Information

Section 15 – Safety, health and environmental regulation/legislation specific for the substance or mixture

REACH (European Union)	For further information, please contact: Manufacturer, importer, supplier.
CH INV (Switzerland)	The formulation contains substances listed on the Swiss Inventory. Not in compliance with the inventory.
TSCA (USA)	Polymer exemption. On TSCA Inventory.
DSL (Canada)	All components of this product are on the Canadian DSL
AICS (Australia)	On the inventory, or in compliance with the inventory
NZIoC (New Zealand)	On the inventory, or in compliance with the inventory
ENCS (Japan)	On the inventory, or in compliance with the inventory
ISHL (Japan)	For further information, please contact: Manufacturer, importer, supplier.
KECI (Korea)	On the inventory, or in compliance with the inventory
PICCS (Philippines)	Polymer exemption. On the inventory, or in compliance with the inventory.
IECSC (China)	Simplified Notification Approved under SABIC
TCSI (Taiwan)	For further information, please contact: Manufacturer, importer, supplier.
EHSNR (Malaysia)	For further information, please contact: Manufacturer, importer, supplier.
CICR (Turkey)	For further information, please contact: Manufacturer, importer, supplier.

Section 15.1 – Other applicable national regulatory information

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable



Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on : Not applicable
the control of major-accident hazards involving dangerous substances
Seveso III: Directive 2012/18/EU of the European Parliament and of the : Not applicable
Council on the control of major-accident hazards involving dangerous
substances.

Section 15.2 – Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

Section 16 – Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Issue Date	23-February-2026
Revision Date	No information available
Revision Note	No information available

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006, COMMISSION
REGULATION (EU) No. 830/2015 of 20 May 2015

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End of Safety Data Sheet