

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Apium PEEK 450
Apium PEEK 4000
Apium PEEK CFR
Apium PEEK CFR 4000
Apium PEEK GFR
Apium PEI 9085
Apium PVDF
Apium PEKK Amorph
Apium PP
Apium ABS ESD
Apium Smart ABS

Relevant identified uses of the substance or mixture:

Plastics/polymer processing (Material Extrusion - MEX)

Details of the supplier of the safety data sheet:

Siemensallee 84
76187 Karlsruhe
Deutschland
Tel. +49 721 13 20 95 0
www.apiumtec.com
Competent person: info@apiumtec.com

2. Hazards identification

Classification of the substance or mixture according to Regulation (EC) No 1272/2008 (CLP):

No need for classification according to GHS criteria for this product.

Label elements:

The mixture is not subject to specific labelling in accordance with GHS criteria.

Other hazards:

There are no known risks, if the regulation/details for handling are observed. Contact with molten product may cause severe burns.

3. Composition/information on ingredients

Description of the mixture:

Mixture based on thermoplastic polymer.
Possibly containing additives and processing aids.
Possibly containing glass fibres, carbon fibres, graphite and/or carbon black.

Information on ingredients:

Ingredients with labelling requirements are not contained.

4. First aid measures

After inhalation:

After inhalation of thermal decomposition products, remove person from the danger zone. Oxygen supply, apply artificial respiration if necessary. Keep quiet, warm and seek medical help.

After skin contact:

In case of skin irritation caused by glass or carbon fibres, wash skin thoroughly with cold water. Do not use warm water, as this will open the pores of the skin, thus enabling the fibres to enter more deeply. Do not rub or scratch. Remove contaminated clothing. In the event of persisting skin irritation, seek medical help.

After eye contact:

After contact with molten polymer cool immediately with plenty of cold water. Contact an eye specialist.

After ingestion:

In case of persistent symptoms, seek medical help.

Most important symptoms and effects, both acute and delayed:

No significant reaction of the human body to the product known.
No hazard is expected under intended use and appropriate handling.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

5. Firefighting measures

Suitable extinguishing media:

Water spray, alcohol-resistant foam, carbon dioxide, dry chemical foam.

Unsuitable extinguishing media:

Water jet.

Special hazards arising from the substance or mixture:

With carbonization and incomplete combustion toxic gases develop, predominantly carbon dioxide and carbon monoxide. The development of further fission and oxidation products is dependent on the conditions of burning. Traces of other toxic substances may develop under certain conditions of burning.

Advice for firefighters:

If exposed to fumes and carbonization gases during fire-fighting measures, rescue operations and cleanup wear a self-contained breathing apparatus. In an advanced state of fire, the molten polymer must be cooled with water. Water used to extinguish the fire, fire remainders must be collected, and water disposed of, in accordance with local regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Collect product (Danger of slipping).

Environmental precautions:

Let not enter surface water and sewage water system.

Methods and material for containment and cleaning up:

Mechanical cleaning up.

7. Handling and storage

Precautions for safe handling:

Avoid overheating of material by improper handling. Under high processing temperatures or excessively long residence harmful gases and vapors might develop. Use with adequate ventilation. Local exhaust ventilation should be provided.

General industrial hygiene regulations are to be observed.

Wash hands before breaks and at the end of workday.

Food and tobacco should not be kept in the workplace.

Do not eat, drink or smoke in the workplace.

Conditions for safe storage, including any incompatibilities:

No special measures necessary.

The appropriate company regulations for fire prevention are to be followed.

8. Exposure controls/personal protection

Control parameters:

The general limit for dust is valid.

Exposure controls:

The working area should be well ventilated.

Respiratory protection:

Wear protective breathing apparatus in case of dust exposure and/or insufficient ventilation (e.g. DIN EN 143 type FFP1/FFP2).

Eye/face protection:

Safety glasses with side-shields

Hand protection/skin protection:

Wearing of gloves, for example gloves made from leather (DIN EN 388), is recommended for people with sensitive skin. Skin protection should be used (barrier cream containing tanning agent).

9. Physical and chemical properties

Appearance: solid (monofilament)

Odour/odour threshold: product-specific

Melting point/Melting range: n.a.

Initial boiling point and Boiling range: not applicable (solid)

Relative density: > 1 g/cm³ pH (20 °C): not applicable (solid)

Flash point: not applicable (solid)

Evaporation rate: not applicable

Flammability (solid, gas): n/a

Upper/lower flammability or explosive limits: not applicable

Vapour pressure: not applicable (solid)

Vapour density: not applicable

Solubility(ies): insoluble (water, 20 °C)

Partition coefficient: n-octanol/water: not applicable

Auto-ignition temperature: not applicable

Decomposition temperature: n.a.

Viscosity: not applicable (solid)

Explosive properties: no data available

Oxidising properties: not applicable

Other information: No data available.

10. Stability and reactivity

Reactivity:

No hazardous reactions known when stored and handled according to instructions and used for its intended purpose.

Chemical stability:

Product is stable. No hazardous reactions known when stored and handled according to instructions and used for its intended purpose.

Possibility of hazardous reactions:

No hazardous reactions known when stored and handled according to instructions.

Conditions to avoid:

Do not heat to a temperature above the decomposition temperature.

Incompatible materials:

Strong acids, strong alkalis, strong oxidizing agents.

Hazardous decomposition products:

No decomposition when handled according to instructions. By strong overheating of the material carbon oxides, nitrogen oxides, sulphur oxides, traces of hydrogen cyanides and other toxic vapors can be generated.

11. Toxicological information

Acute toxicity:

With proper use and in accordance with regulations there are no known dangers to health.

Chronic toxicity:

When used and handled according to specifications, the product does not have any harmful effects.

Other information:

In our experience and according to the literature provided to us the product does not cause any noxious effects when used and handled according to regulations.

12. Ecological information

Toxicity:

Data about ecological effects are not available for this product.

Persistence and degradability:

No data available.

Bioaccumulation potential and mobility in soil:

Biodegradability is not probable due to the consistency as well as the insolubility in water of the product.

Results of the PBT and vPvB assessment:

The product does not fulfil the criteria for classification as PBT or vPvB.

Other adverse effects:

No relevant information available. Due to the consistency of the product a disperse distribution in the environment is not likely. Therefore, according to the present state of knowledge negative ecological effects are not expected.

13. Disposal considerations

Waste treatment methods:

Product residues can be recycled or treated in an energy recovery plant.

European waste catalogue:

The unpolluted product has no dangerous properties and is therefore not a hazardous waste within the meaning of regulation on the European List of wastes.

Waste codes/waste identification:

The exact assignment to a waste code must be carried out source- and use-related. Proposals for the waste code numbers based on the probable use of the unpolluted product:

07 02 13 (waste plastic)

20 01 39 (plastics from separately collected fractions)

Packaging:

Uncontaminated or cleaned packaging can be recycled without verification.

14. Transport information

Not classified as dangerous in the meaning of transport regulations. UN number:

Not applicable.

UN proper shipping name:

Not applicable.

Transport hazard class(es):

Not applicable.

Packing group:

Not applicable.

Environmental hazards:

Not applicable.

Special precautions for user:

No special precautions.

Transport in bulk according to Annex II of Marpol and the IBC Code:

Not applicable.

15. Regulatory information

Safety, health and environmental regulations/legislation specific:

A safety data sheet for this article is not required by law. The particulars given in this Safety Data Sheet are not required in accordance with article 31 and annex II of the Regulation (EC) No 1907/2006. They merely serve the purpose of providing sufficient information on the voluntary basis with a view to ensure the safe utilization of such mixture.

EU regulations:

No dangerous substance in the sense of EU-directives.

Chemical safety assessment:

A chemical safety assessment has not been carried out.

National regulations:

Storage class VCI/TRGS 510 (Germany): 11 (flammable solid materials)
Water hazard class: not hazardous to water (VwVwS/Germany regulation on substances hazardous to water)

16. Other information

The full text of hazard statements: No H-phrases listed in the document.
Indication of changes: First issue, status as of 03/18. Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values. They do not represent guaranteed properly values and therefore they must not be used for specification purposes. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. It is the user's responsibility to ensure that existing legislation and regulation are followed.