Revision Date 20.07.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Trade name Ketaspire® PEEK AM Filament CF10 LS1

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

Uses of the Substance/Mixture

- Plastics industry

1.3 Details of the supplier of the safety data sheet

Company

SOLVAY SPECIALTY POLYMERS ITALY S.p.A. VIALE LOMBARDIA, 20 20021, BOLLATE ITALIA Tel: +39-02-290921

E-mail address

manager.sds@solvay.com

1.4 Emergency telephone number

+44(0)1235 239 670 [CareChem 24]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (Regulation (EC) No 1272/2008)

- Not classified as hazardous product under the regulation above.

2.2 Label elements

Regulation (EC) No 1272/2008

- Not labelled as hazardous product under the above regulation.

2.3 Other hazards which do not result in classification

None known.

SECTION 3: Composition/information on ingredients

3.1 Substance

- Not applicable, this product is a mixture.

3.2 Mixture

Information on Components and Impurities

Chemical name Identification number	Classification Regulation (EC) No 1272/2008	Concentrati on [%]
-------------------------------------	--	-----------------------

Revision Date 20.07.2020

Polyetheretherketone	CAS-No. : 29658-26-2	Not classified	>= 75 - <= 95
	self classification	ן ו	I
carbon	CAS-No. : 7440-44-0 EINECS-No. : 231-153-3	Not classified	>= 10 - <= 15
	self classification	י ו	I

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation

- Remove to fresh air.
- If symptoms persist, call a physician.

In case of skin contact

- Cool skin rapidly with cold water after contact with hot polymer.
- Do not peel polymer from the skin.
- Obtain medical attention.

In case of eye contact

- Flush eyes with running water for several minutes, while keeping the eyelids wide open.
- If eye irritation persists, consult a physician

In case of ingestion

- Never give anything by mouth to an unconscious person.
- If a large amount is swallowed, get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation

- Effects
 - Mechanical irritation from the particulates generated by the product.
- Thermal decomposition can lead to release of hazardous gases and vapors

In case of skin contact

Effects

- Mechanical irritation from the particulates generated by the product.

In case of eye contact

Effects

- Mechanical irritation from the particulates generated by the product.

In case of ingestion

Effects

- Low ingestion hazard.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

- None

P00000225728 Version : 2.00 / GB (EN)

Revision Date 20.07.2020

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

- powder
- Foam
- Water
- Water spray
- Carbon dioxide (CO2)

Unsuitable extinguishing media

- None known.

5.2 Special hazards arising from the substance or mixture

- Combustible material
- In a fire, the polymer melts, producing droplets which may propagate fire.
- Once started, a fire will tend to self extinguish (see section 9).
- Heating can release hazardous gases.

5.3 Advice for firefighters

Special protective equipment for firefighters

- In the event of fire, wear self-contained breathing apparatus.
- Fire fighters must wear fire resistant personnel protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel

- Refer to protective measures listed in sections 7 and 8.

Advice for emergency responders

- Sweep up to prevent slipping hazard.
- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

- Should not be released into the environment.
- The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and materials for containment and cleaning up

- Sweep up and shovel into suitable containers for disposal.
- Avoid dust formation.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

- Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

P00000225728 Version : 2.00 / GB (EN)

- Take measures to prevent the build up of electrostatic charge.
- Ensure all equipment is electrically grounded before beginning transfer operations.
- Use only equipment and materials which are compatible with the product.
- To avoid thermal decomposition, do not overheat.

Hygiene measures

- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Keep container closed.
- Keep away from heat and sources of ignition.
- Keep away from open flames, hot surfaces and sources of ignition.
- To avoid thermal decomposition, do not overheat.
- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.
- Do not smoke.

7.3 Specific end use(s)

- For further information, please contact:
- Supplier

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Contains no substances with occupational exposure limit values above their regulatory reporting threshold.

8.2 Exposure controls

Control measures

Engineering measures

- Provide local ventilation appropriate to the product decomposition risk (see section 10).
- Provide appropriate exhaust ventilation at places where dust is formed.
- Refer to protective measures listed in sections 7 and 8.
- Apply technical measures to comply with the occupational exposure limits.

Individual protection measures

Respiratory protection

- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Use only respiratory protection that conforms to international/ national standards.
- Respiratory protection in the formation of dust particles or vapors, respiratory disorders if ventilation is not appropriate (for dust EN 140 or EN 149 The particulate filter of type P2 or FFP2, vapor DIN EN 140 or DIN EN 149 Filter vapor A).

Hand protection

- When handling hot melt, use protective gloves that are resistant to heat (EN 407:2004), eg. of textile or leather.

Eye protection

- Safety glasses with side-shields conforming to EN 166:2002

Skin and body protection

- Protect the body according to activity and possible exposure (protective clothing, general requirements: SIST EN ISO 13688: 2013, protective shoes SIST EN 201345: 2012).

Hygiene measures

- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.
- Protective measures
 - When using do not eat, drink or smoke.

P00000225728 Version : 2.00 / GB (EN)



Revision Date 20.07.2020

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	<u>Form</u> :	filament
	Physical state:	solid
	<u>Colour</u> :	black
<u>Odour</u>	odourless	
Odour Threshold	No data available	e
рH	Not applicable	
Melting point/freezing point	Melting point/ran	<u>ge</u> : 340 °C
Initial boiling point and boiling range	<u>Boiling point/boil</u> Not applicable	ng range:
Flash point	Not applicable	
Evaporation rate (Butylacetate = 1)	No data available	e
Flammability (liquids)	The product is no	ot flammable.
Flammability/Explosive limit	No data available	e
Auto-ignition temperature	No data available	e
<u>Vapour pressure</u>	Not applicable	
Vapour density	Not applicable	
Density	No data available	9
Relative density	No data available	9
<u>Solubility</u>	<u>Water solubility</u> : negligible	
Partition coefficient: n-octanol/water	No data available	e
Decomposition temperature	No data available	e
<u>Viscosity</u>	No data available	e
Explosive properties	No data available	e
Oxidizing properties	No data available	e
Other information		

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal conditions.

10.3 Possibility of hazardous reactions

P00000225728 Version : 2.00 / GB (EN)



- No dangerous reaction known under conditions of normal use.

polymerisation

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

- Heat, flames and sparks.
- To avoid thermal decomposition, do not overheat.
- Avoid dust formation.
- The normal temperature for processing this resin exceeds the decomposition and/or ignition temperature of some other polymeric resins, such as polyacetal, polyvinyl chloride (PVC), polypropylene, etc. If PVC or any other resin with a decomposition temperature below 371°C / 700°F is molded or handled in your equipment, these materials can rapidly decompose and/or react with this resin at the temperatures used to process this resin. Inadvertent contamination of this resin with these materials from the material handling system or other equipment can result in a rapid, possibly violent release of decomposition fumes, when the contaminated material is brought to processing temperature. To avoid, thoroughly clean molding and other processing equipment prior to changeover and prevent cross contamination of material handling systems.

10.5 Incompatible materials

- Polymeric resins

10.6 Hazardous decomposition products

- Carbon monoxide
- Sulphur oxides
- Hydrocarbons
- Hydrogen fluoride
- The release of other hazardous decomposition products is possible.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	
Acute oral toxicity Acute inhalation toxicity	No data available No data available
Acute dermal toxicity Acute toxicity (other routes of administration)	No data available No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitisation	No data available
<u>Mutagenicity</u>	
Genotoxicity in vitro Genotoxicity in vivo <u>Carcinogenicity</u> <u>Toxicity for reproduction and developme</u>	No data available No data available No data available <u>ent</u>
Toxicity to reproduction/Fertility Developmental Toxicity/Teratogenicity <u>STOT</u>	No data available No data available
STOT - single exposure STOT - repeated exposure	No data available No data available
Experience with human exposure Aspiration toxicity	No data available No data available



P00000225728 Version : 2.00 / GB (EN)

	Ketaspire® PEEK AM Filament CF10 LS1	
	Revision Date 20.07.2020	
Further information	Because the components are encapsulated in the resin and may not be bioavailable in the body, they may not exert the above mentioned health effects. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.	
SECTION 12: Ecological information		
12.1 Toxicity		
Aquatic Compartment Acute toxicity to fish	No data available	
Acute toxicity to daphnia and other aquatic invertebrates	No data available	
Toxicity to aquatic plants Toxicity to microorganisms	No data available No data available	
Chronic toxicity to fish	No data available	
Chronic toxicity to daphnia and other aquatic invertebrates	No data available	
12.2 Persistence and degradability		
Abiotic degradation	No data available	
Physical- and photo-chemical elimination	No data available	
Biodegradation	No data available	
12.3 Bioaccumulative potential		
Partition coefficient: n-octanol/water	No data available	
Bioconcentration factor (BCF)	No data available	
12.4 Mobility in soil		
Adsorption potential (Koc)	No data available	
Known distribution to environmental compartments		
12.5 Results of PBT and vPvB assessment	No data available	
12.6 Other adverse effects	No data available	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

- In accordance with local and national regulations.
- Waste characterizations and compliance with applicable laws and regulations are the responsibility of the waste generator.
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.
- Can be landfilled or incinerated, when in compliance with local regulations.
- Do not dispose of waste product into drains or watercourses.

P00000225728 Version : 2.00 / GB (EN)

www.solvay.com



Advice on cleaning and disposal of packaging

- Empty containers.
- Dispose of as unused product.
- For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device or industrial landfill.

SECTION 14: Transport information

ADN/ADNR

not regulated

ADR not regulated

RID not regulated

IMDG not regulated

IATA

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Notification status

Inventory Information	Status
United States TSCA Inventory	 All substances listed as active on the TSCA inventory
United States TSCA Inventory	- Listed on Inventory
Canadian Domestic Substances List (DSL)	- One or more components not listed on inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- In compliance with the inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- One or more components not listed on inventory

P00000225728 Version : 2.00 / GB (EN)



Revision Date 20.07.2020

Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Not in compliance with the inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
EU. European Registration, Evaluation, Authorisation and Restriction of Chemical (REACH)	- "When purchased from a Solvay legal entity based in the EEA (""European" "Economic Area""), this product is compliant with the registration" provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIOC inventory. The HSNO status of the product has not been assessed.

15.2 Chemical safety assessment

- no data available

SECTION 16: Other information

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

- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Instructions for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average
- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- GHS/CLP/SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

Further information

- Mixture in CLP Format



P00000225728 Version : 2.00 / GB (EN)

Revision Date 20.07.2020

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.

P00000225728 Version : 2.00 / GB (EN)

