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This document is NOT a Safety Data Sheet. Its purpose is to provide safety information on products not subject to regulations on dangerous substances and preparations.

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

1.1 Product identifier

- Trade name

SOLEF® PVDF AM FILAMENT MSC NT 1

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

Uses of the Substance/Mixture

- Article
- Professional use
- For industrial use only

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

101. 100 02 2000

E-mail address

sds.solvay@solvay.com

1.4 Emergency telephone number

+44(0)1235 239 671 [CareChem 24]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification (UN)

- The product is an article and is not subject of the Globally Harmonised System (GHS).

2.2 Label elements

GHS label elements (UN)

- The product is an article and is not subject of the Globally Harmonised System (GHS).

2.3 Other hazards which do not result in classification

- Thermal decomposition can lead to release of toxic and corrosive gases.

SECTION 3: Composition/information on ingredients

3.1 Substance

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Information on Components and Impurities

Chemical name	CAS-No.	Concentration [%]
1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene	9011-17-0	> 99.9

3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation

Exposure to decomposition products

- Move to fresh air.
- Oxygen or artificial respiration if needed.
- Symptoms of poisoning may develop many hours after exposure.
- Keep under medical supervision for at least 48 hours.

In case of skin contact

Exposure to decomposition products

- Wash off with soap and water.
- Immediately apply calcium gluconate gel 2.5% and massage into the affected area using rubber gloves; continue to massage while repeatedly applying gel until 15 minutes after pain is relieved.
- Consult a physician.

In case of eye contact

Exposure to decomposition products

- Rinse immediately with plenty of water, also under the eyelids.
- Remove contact lenses.

In case of ingestion

- negligible

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation

Effects

- The thermal decomposition vapours of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

Symptoms

Exposure to decomposition products

- Headache
- Shortness of breath
- Cough

In case of skin contact

Symptoms

Exposure to decomposition products

- Irritation
- Redness
- Burn

In case of eye contact

Symptoms

Exposure to decomposition products

- Irritation

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- Redness
- Burn

In case of ingestion

Effects

- Low ingestion hazard.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

- None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

- Water
- powder
- Foam
- Dry chemical
- Carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting

- In the event of fire and/or explosion do not breathe fumes.
- Hazardous decomposition products formed under fire conditions.

Hazardous combustion products:

- Hydrogen fluoride
- Fluorophosgene

5.3 Advice for firefighters

Special protective equipment for firefighters

- Wear self-contained breathing apparatus and protective suit.
- When intervention in close proximity wear acid resistant over suit.

Further information

- Evacuate personnel to safe areas.
- Approach from upwind.
- Protect intervention team with a water spray as they approach the fire.
- Keep containers and surroundings cool with water spray.
- Keep product and empty container away from heat and sources of ignition.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Ensure adequate ventilation.
- Sweep up to prevent slipping hazard.

6.2 Environmental precautions

- Should not be released into the environment.
- Do not flush into surface water or sanitary sewer system.

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6.3 Methods and materials for containment and cleaning up

- Sweep up or vacuum up spillage and collect in suitable container for disposal.

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

- Ensure adequate ventilation.
- To avoid thermal decomposition, do not overheat.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- No special storage conditions required.

7.3 Specific end use(s)

- Contact your supplier for additional information

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Threshold limit values of by-products from thermal decomposition:

Components with other occupational exposure limits

1					
Components	Value type	Value	Basis		
Hydrofluoric acid	TWA	0.5 ppm	USA. ACGIH Threshold Limit Values (TLV)		
		Danger of cutaneous absorption Expressed as :Fluorine			
Hydrofluoric acid	С	2 ppm	USA. ACGIH Threshold Limit Values (TLV)		
	Danger of cutaneous absorption Expressed as :Fluorine				
Carbonyl difluoride	TWA	2 ppm	USA. ACGIH Threshold Limit Values (TLV)		
Carbonyl difluoride	STEL	5 ppm	USA. ACGIH Threshold Limit Values (TLV)		

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Biological Exposure Indices

Components	Value type	Value	Basis
Hydrofluoric acid	BEI	2 mg/l Fluoride Urine Prior to shift (16 hours after exposure ceases)	ACGIH - Biological Exposure Indices (BEI)
Hydrofluoric acid	BEI	3 mg/l Fluoride Urine End of shift (As soon as possible after exposure ceases)	ACGIH - Biological Exposure Indices (BEI)

8.2 Exposure controls

Control measures

Engineering measures

- Ensure adequate ventilation.

Individual protection measures

Respiratory protection

- In case of decomposition (see section 10), use an air breathing apparatus with face mask.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<u>Appearance</u> <u>Form</u>: filament

Physical state: solid

Colour: white

Odour No data available

Odour Threshold No data available

pH No data available

Melting point/freezing point Melting point/range: 140 - 150 °C

Initial boiling point and boiling rangeNo data availableFlash pointNo data availableEvaporation rate (Butylacetate = 1)No data available

Flammability (solid, gas) The product is not flammable.

Flammability/Explosive limit

No data available

Auto-ignition temperature

No data available

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Vapour pressure No data available

<u>Vapour density</u> No data available

Density No data available

Relative density No data available

<u>Solubility</u>: <u>Water solubility</u>:

insoluble

Partition coefficient: n-octanol/water No data available

<u>Decomposition temperature</u> > 290 °C

Viscosity No data available

Explosive properties No data available

Oxidizing properties No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable

10.3 Possibility of hazardous reactions

- None known.

10.4 Conditions to avoid

- To avoid thermal decomposition, do not overheat.

10.5 Incompatible materials

- None known.

10.6 Hazardous decomposition products

- Gaseous hydrogen fluoride (HF).
- Fluorophosgene
- Particulates of carbon
- Carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity No data available

Acute inhalation toxicity No data available

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Acute dermal toxicity No data available

Acute toxicity (other routes of

administration)

No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation No data available

Mutagenicity

Genotoxicity in vivo

No data available

No data available

<u>Carcinogenicity</u> No data available

Toxicity for reproduction and development

Toxicity to reproduction/Fertility No data available

Developmental Toxicity/Teratogenicity No data available

<u>STOT</u>

STOT - single exposure No data available

STOT - repeated exposure No data available

Experience with human exposure No data available

Aspiration toxicity No data available

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 plantsNo data availableToxicity to microorganismsNo data available

Chronic toxicity to fish No data available

Chronic toxicity to daphnia and other aquatic invertebrates

nia and No data available

12.2 Persistence and degradability

Abiotic degradation No data available

Physical- and photo-chemical

<u>elimination</u>

No data available

Biodegradation No data available

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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 No data available

compartments

12.5 Results of PBT and vPvB assessment12.6 Other adverse effectsNo data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

- Dispose of in accordance with local regulations.

SECTION 14: Transport information

IMDG

not regulated

IATA

not regulated

SECTION 15: Regulatory information

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

Local regulations

None

SECTION 16: Other information

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

- C Ceiling limit

STEL Short-term exposure limit
 TWA 8-hour, time-weighted average

- 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%.

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- 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.

The information provided in this document 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.

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