

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 08.04.2024

Version No: 1.00

Revision: 08.04.2024

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

1.1 Product identifier

Trade name:

Fluonox® Perfluoro elastomer (FFKM)

Grades:

FFR35P, FFR75PC, FFR35PC

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

Application of the substance / the preparation: Manufacture of rubber products

Uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Gujarat Fluorochemicals Limited
12/A Dahej, GIDC, Industrial Estate
Dahej, Gujarat 392130, India
Telephone : +91-2641-618031(Admin)/ 618086-87(Security)
Email : inoflon@gfl.co.in, contact@gfl.co.in

1.4 Emergency telephone number:

Emergency Telephone Number: +91-2643-618081 (SHE) / 618086-87(Security)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The substance is not classified, according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not determined.

vPvB: Not determined.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS No. Description

Substance Name	CAS-No.	EC No.	Concentration
Perfluoro (Methyl Vinyl ether)- Tetrafluoroethylene Copolymer	26425-79-6	842-324-2	100 % by weight

Identification number(s)

EC number: 842-324-2

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

No special measures required.

If symptoms persist consult doctor.

After inhalation:

Supply fresh air.

After skin contact:

Generally, the product does not irritate the skin.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse eyes with cold water for at least 15 minutes. DO NOT TRY TO REMOVE THE MATERIAL.

Get immediately medical advice/attention.

After swallowing: Rinse Mouth. First aid is generally not anticipated.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents:

Water with full jet

Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released high temperature:

Carbon monoxide, Carbon dioxide, Hydrofluoric Acid, Perfluoroisobutylene, Low molecular weight fluoropolymers and Particulates

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.**Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective clothing.

Avoid formation of dust.

Keep away from ignition sources.

6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.

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6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Prevent formation of dust.

Ensure good ventilation/exhaustion at the workplace.

Do not eat, drink or smoke when using perfluoroelastomers.

Avoid skin contact with the heated material.

Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store only in the original receptacle.

Information about storage in one common storage facility: Do not store near heat sources (>250°C).

Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Appropriate engineering controls No further data; see item 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Provide for sufficient ventilation or local exhaust ventilation when product is heated.

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.



During heating: avoid breathing of vapors. At higher processing temperatures, if there is a potential for exposure from an uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection, apply a positive pressure supplied-air respirator

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Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

PVC gloves
Rubber gloves
Nitrile rubber, NBR
Butyl rubber, BR
Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

Body protection:



Protective work clothing

Environmental exposure controls No further relevant information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Solid
Form:	Solid
Colour:	White, like rubber,
Odour:	Odourless
Odour threshold:	Not available
Melting point/freezing point:	>300°C
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Product is not flammable.
Lower and upper explosion limit	
Lower:	Not applicable.
Upper:	Not applicable.
Flash point:	Not applicable.
Ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.

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Solubility**water:**

Insoluble.
Not miscible or difficult to mix.

Partition coefficient n-octanol/water (log value) Not determined.**Vapour pressure:**

Not applicable.

Density and/or relative density**Density at 23 °C:**

Not determined

Relative density2.0 g/cm³ (at 23°C, reference water = 1)**Vapour density**

Not applicable.

Relative gas density

Not applicable.

Particle characteristics

See item 3.

9.2 Other information**Explosive properties:**

Product does not present an explosion hazard.

Oxidising properties

No

Evaporation rate

Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.**10.2 Chemical stability**

No decomposition if used and stored according to specifications.

Stable and hazardous polymerization will not occur

10.3 Possibility of hazardous reactions Hazardous polymerization will not occur**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:**

Finely dispersed, reactive metals.

10.6 Hazardous decomposition products:

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released at high temperature:

Carbon monoxide, Carbon dioxide, Hydrofluoric Acid, Perfluoroisobutylene, Low molecular weight fluoropolymers and Particulates

SECTION 11: Toxicological information

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

Based on available data, the classification criteria are not met.

Information on polymer fume fever: a disease with influenza-like symptoms e.g. breathlessness, tremor, fever, cough. It is caused by the inhalation of decomposition product of fluoropolymers.

Smoking of decontaminated tobacco can cause exposure to decomposition products. Symptoms normally occur after 2 hours and fade within 36-48 hours. Continuing symptoms in respiratory tract have not been observed.

Skin corrosion/irritation Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Based on available data, the classification criteria are not met.**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure** Based on available data, the classification criteria are not met.**STOT-repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**11.2 Information on other hazards****Endocrine disrupting properties** Substance is not listed.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment Not determined.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal must be made according to local and international regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR/RID/ADN, IMDG, IATA Void

14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA

Class Void

14.4 Packing group

ADR/RID/ADN, IMDG, IATA Void

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Maritime transport in bulk according to IMO instruments Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

UN "Model Regulation": Void

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

Substance is not listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

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Annex II - REPORTABLE EXPLOSIVES PRECURSORS Substance is not listed.

Regulation (EC) No 273/2004 on drug precursors Substance is not listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Substance is not listed.

Chemical Inventories:

EU - Polymer Exemption

Japan - ENCS

Australia - AICS

Canada - DSL

China - IECSC

Korea - ECL

New Zealand - NZIoC

Philippines - PICCS

Taiwan - TCSI

USA - TSCA

Thailand - TECI

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

MARPOL: (from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

UN: United Nations (also UNO: United Nations Organization)

NOEC: No Observed Effect Concentration

OECD: Organisation for Economic Co-operation and Development

ASTM: American Society for Testing and Materials

WAF: Water Accommodated Fraction

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative