

Safety Data Sheet (SDS)

Revision Date:
21 March 2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: PVDF Membrane 30 cm x 3 m, Roll
Product Code: PVDF022, PVDF045
CAS Number: -
EC Number: -

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. İpekyolu Cad. Ata Teknokent A.Ş. B Blok No: 20/113 Yakutiye/Erzurum
Türkiye
Tel/Fax: 0090 442 282 20 44
Emergency
phone number: 0090 553 828 76 90

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

2.2 Label elements

Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Symbols/Pictograms	Not classified
Precautionary Statement(s)	Not Applicable

2.3 Other hazards

Not known

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Name

Ethene, 1,1-difluoro-, homopolymer

Synonyms: Polyvinylidene fluoride; Vinylidene fluoride, polymer; poly(1,1-difluoroethane-1,2-diyl);poly(1,1-difluoroethylene); poly(vinylidene fluoride)

Concentration: Solid

Formula: (C₂H₂F₂)_x

Molecular Weight: -

This product is a substance.

3.2 Substance

Chemical Name	CAS No	Weight %
Ethene, 1,1-difluoro-, homopolymer	24937-79-9	98-100

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Skin Contact	Rinse cautiously with water for several minutes. Immediate medical attention is not required.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	No known significant effects or critical hazards.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically
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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No specific fire or explosion hazard.
Hazardous combustion products	Decomposition products may include the following materials: carbon dioxide, carbon monoxide, halogenated compounds

5.3 Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters	Thermal decomposition (>315°C) may produce an irritating mixture of smoke and highly toxic gases. Fluoride emissions may be significant. Plastic dust particles suspended in air are combustible and may be explosive.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 20 to 25°C (68 to 77°F). Store in original container protected from direct sunlight in a dry cool and well-ventilated area, away from incompatible materials and food and drink.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Wash hands, forearms and face after handling.

Personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Hand protection: Impervious gloves.

Skin and body protection: Lightweight protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	Solid (Porous)
b) Odor:	Odorless
c) Odor Threshold:	No data available
d) pH:	No data available
e) Melting point:	230°C (446°F)
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Thermal decomposition (>315°C) may produce an irritating mixture of smoke and highly toxic gases. Fluoride emissions may be significant.
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	2 kPa (15 mm Hg)
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	No data available
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	370°C (698°F)
r) Viscosity:	No data available
s) Explosive properties:	No data available

t) Oxidizing properties:

No data available

SECTION 10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity:	Stable
Chemical stability:	Stable at a cool and dry place.
Possibility of hazardous reactions:	None under normal processing
Conditions to avoid:	No specific data.
Incompatible materials:	No specific data.
Hazardous decomposition products:	None under normal use conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Acute toxicity:	Not available.
b) Skin corrosion / irritation:	Not available.
c) Serious eye damage/eye irritation:	Not available.
d) Carcinogenicity:	Not available.
e) Reproductive toxicity:	Not available.
f) STOT - SE:	No data available.
g) STOT - RE:	No data available.
h) Aspiration hazard:	No data available.

11.2 Potential health effects

Ingestion:	No known significant effects or critical hazards.
Inhalation:	No known significant effects or critical hazards.
Skin:	No known significant effects or critical hazards.
Eyes:	No known significant effects or critical hazards.

11.3 Additional Information

No additional information is available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Not available.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment is not required/was not conducted.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with federal, state and local requirements.

Contaminated packaging

Dispose of as unused product. Do not reuse empty containers.

Section 14. TRANSPORT INFORMATION

14.1 DOT (US)

Not regulated.

14.2 IMDG

Not regulated.

14.3 IATA

No dangerous good in sense of these transport regulations.

SECTION 15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 [REACH], as amended by Commission Regulation (EU) No 453/2010.

15.1 SARA

SARA 302-304: This product is not regulated by SARA.

15.2 Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs)

Not listed

15.3 Right to know components

Not applicable.

SECTION 16. OTHER INFORMATION**Key to abbreviations and acronyms**

STOT-SE: Specific Target Organ Toxicity - Single Exposure

STOT-RE: Specific Target Organ Toxicity - Repeated Exposure

PBT: Persistent Bioaccumulative and Toxic

vPvB: very Persistent very Bioaccumulative and toxic

ADR: European Agreement concerning the international carriage of Dangerous goods by Road

CAS: Chemical Abstracts Service

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime code for Dangerous Goods

REACH: Registration, Evaluation, Authorization and restriction of Chemicals

RID: Regulations concerning the International transport of Dangerous goods by rail