
 <p>National Petrochemical Company(NPC)</p>	<p align="center">Material Safety Data Sheet (MSDS)</p> <p align="center">According to the Directives 91/155/CEE-2001/58/CE-ISO 11014-1</p>	<p>Page: 1 of 6</p> <p>Revision Number: 1</p>
	<p>Product Name:</p> <p align="center">PET (Polyethylene Terephthalate)</p>	 <p align="center"> Reactivity Flammability Health </p>

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/ UNDERTAKING


Identification of the substance or preparation:	POLYETHYLENE TEREPHTHALATE
Country of origin:	Iran (Islamic Republic of Iran)
CAS Number:	25038-59-9
Synonyms:	PET , Polyester
Company/undertaking identification	National Petrochemical Company Iran Petrochemical Commercial Company (IPCC)
Manufacturer subcontractor:	None
Emergency phone number:	00982188881735
Contact email:	msds@petrochem-ir.net
Fax:	00982188839511
Association/Organization:	None
Use of the substance/Preparation:	Bottle , Fiber and Film Products

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous substances:	At complete combustion, the major products formed are carbon dioxide and carbon monoxide. Other volatiles will be oligomers of PET, acetaldehyde and Low molecular weight alcohols/aldehydes.
Hazardous label(s):	Small. Hazardous polymerization will not occur.
Toxicological characteristics:	Molten polymer will adhere to the skin causing deep thermal burns. May cause irritation if dust comes in contact with eye.
Substances present at a concentration below the minimum danger:	-
Other component:	-

3. IDENTIFICATION OF HAZARDS

Risk phrases:	None known
Skin contact:	Molten polymer will adhere to the skin causing deep thermal burns.
Eye contact:	May cause irritation if dust comes in contact with eyes
If swallowed:	NOT A PROBABLE ROUTE OF EXPOSURE.
Other information:	Polyester Fibers are coated with minor quantities of finish oils. Processes may volatilize portions of these finishes. Ventilation is recommended to minimize exposure to such finish mists, which should not exceed a concentration of 5 mg/m3 the ACGIH TLV for mineral oil.

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4. FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor
NEVER induce swallowing in an unconscious person.

In case of exposure by inhalation:

Remove to fresh air if effects occur.

In case of splashes or contact with eyes:

Flush with water to remove particles.

In case of swallowing:

No treatment required (no harm).

Fibers can be regarded as physiologically inert since, no poisoning or other injurious effects have been observed in cases where this material has been used internally (surgical sutures, Replacement of blood vessels, etc.)On external contact, no signs of dermatitis or other skin injury have been observed.

Note of physician:

5. FIRE FIGHTING MEASURES

Flammable class:

Not determined

Suitable extinguishing media:

Water, CO2, Dry Chemicals, Foam-Fog

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

Avoid excessive inhalation of smoke or potential thermal decomposition products. Wear self contained breathing apparatus meeting NIOSH standards.

Special protective equipment for fire fighting :

Avoid excessive inhalation of smoke or potential thermal decomposition products. Wear self contained breathing apparatus meeting NIOSH standards.

Other information:

Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to products of combustion exists.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:


The interior of molten masses may remain hot for some time because of the low heat conductivity of the polymer. Use care when disposing of molten masses.

Environmental precautions:

Do not breathe vapors or fumes that may be evolved during processing. Material can be handled hot/molten. Contact can cause burns.

Methods for cleaning up and disposal:

Avoid contact with molten material. Clean up by vacuuming or wet sweeping to

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Other information: minimize dust exposure and Sweep up and recover, or mix material with moist absorbent and shovel into suitable chemical waste container. Contaminated area must be isolate.

7. HANDLING AND STORAGE

The regulations relating to storage remises apply to workshop where the product is handled :

Handling:

TSCA Inventory Status: In compliance with TSCA Inventory requirements for commercial purposes.
Under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a Hazardous waste (40 CFR 261.20-24).
If discarded in its purchased form, this product does not meet the RCRA characteristic definition for ignitability, corrosivity or reactivity and is not a RCRA listed waste, however, it Has not been tested by the Toxicity Characteristic Leaching Procedure (TCLP).
SARA, Title III: This material is not known to contain extremely hazardous substances. Do not breathe vapors or fumes that may be evolved during processing. Material can be handled hot/molten. Contact can cause burns. Avoid contact with molten material.
Do not store near flame or incompatible materials. Maintain good housekeeping to control dust accumulations.

Storage:

Specific use(s): Keep containers closed to prevent contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values: Use local ventilation to control fumes from hot processing.

Exposure controls: Use static controls. Static charges can build up and ignite dust or solvent laden atmospheres. Design precautions into processes that can create dust, such as pneumatic conveying systems, Grinding and other physical operations. There is the potential for a dust explosion hazard.

Personal protective equipment: Wear self-contained breathing apparatus and



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Reactivity

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Eye protection:

complete personal protective equipment when potential for exposure to products of combustion exists.

For operations where eye or face contact can occur, eye protection such as goggles or a face shield is recommended.

Respiratory protection:

For operations where inhalation exposure can occur, a NIOSH approved respirator recommended by an industrial hygienist may be necessary.

Hand protection:

Protective gloves are required when handling hot polymer.

Skin and body protection:

Long sleeve cotton shirt and long pants if handling molten polymer.

Health measures:

Local exhaust ventilations may be necessary for some operation

Environmental exposure controls:

PEL (OSHA): None Established

TLV (ACGIH): None Established

AEL* (DuPont): 10 mg/m³, 8 Hr. TWA, total dust
5 mg/m³, 8 Hr. TWA, respirable dust

9. PHYSICAL AND CHEMICAL PROPERTIES

General information:

Pellets or Molten Polymer

Appearance(at 20°C):

STOCK SHAPE MAY BE ROD, PLATE, TUBE, OR STRIP FORM.

Colour:

Clear to grayish white

Odour:

ESSENTIALLY ODORLESS

PH (at 20°C):

Not Applicable

Boiling point/range (°C):

Not determined

Flash point (°C):

440°C Method: ASTM 09129-68

Flammability:

1

Auto-ignition temperature:

500°C

Explosive properties:

N/A

Oxidising properties:

N/A

Vapour pressure(at 20°C):

N/A

Density (at 20°C):

1.38 g/cm³

Solubility (at 20°C):

water solubility: Insoluble in water

Solubility in fats: Insoluble in fats.

Viscosity (40°C):

N/A

Evaporation rate:

N/A

Other information:

None



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10. STABILITY AND REACTIVITY

Stability:	N/A
Conditions to avoid:	None known
Material to avoid:	Strong alkalis. Strong oxidizing agents
Hazardous decomposition products:	Above the decomposition temperature the major volatiles will be low molecular weight organic compounds (oligomers of PET) in addition to acetaldehyde, CO and CO ₂

11. TOXICOLOGICAL INFORMATION



Acute toxicity:	None known
Sub chronic – chronic toxicity:	None known
Sensibilization:	None known
Carcinogenicity:	None known
Reproductive effects:	None known
Human experience:	None known
Other information:	None known

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Not expected to be acutely toxic. But it is harmful if ingested by animals and aquatic life.
Bioaccumulative potential:	Because of high molecular weight and hard decomposition will remain in the soil and sink in the water .accumulation and sedimentation will occur.
Mobility:	-
Persistence and degradability:	Sun light may cause surface degradation .It is expected to be inert in the environment and not to bio gradate.
Other adverse effects:	Not expected to be acutely toxic. But it is harmful if ingested by animals and aquatic life.

13. DISPOSAL CONSIDERATIONS

Disposal of product:	Disposal must be done as territory and /or local government regulations. It can be recycled /reclaimed or burned in an incinerator .Waste management information will help to receive the best results.
Disposal of packaging:	It can be recycled /reclaimed or burned in an incinerator .Waste management information will help to receive the best results

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14. TRANSPORT INFORMATION

Land transport:	Not classified
ADR/RID:	Not classified
Packaging group:	Not classified
Maritime transport:	Not classified
Air transport:	Not classified

15. REGULATORY INFORMATION

Hazardous label(s):	NA
Safety phrases:	None known
Risk phrases:	None known

16. OTHER INFORMATION

Polyester Fibers are coated with minor quantities of finish oils. Processes may volatilize portions of these finishes. Ventilation is recommended to minimize exposure to such finish mists, which should not exceed a concentration of 5 mg/m³ the ACGIH TLV for mineral oil.

The contents and format of this MSDS are in accordance with EEC Commission Directive 2001/58/EC

Disclaimer of liability:

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