

According to the Directives 91/155/CEE-2001/58/CE-ISO 11014-1

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Product Name:

LLDPE Linear Low Density Polyethylene



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

Identification of the substance or preparation: **Country of origin:** CAS Number: Synonyms: Company/undertaking identification

Manufacturer subcontractor: **Emergency phone number: Contact email:** Fax: Association/Organization: Use of the Substance / Preparation:

Linear Low Density Polyethylene Iran (Islamic Republic of Iran) 25087-34-7 LLDPE, PE-LLD **National Petrochemical Company** Iran Petrochemical Commercial Company (IPCC) None 00982188881735 msds@petrochem-ir.net 00982188839511 None Liner bags, deep freeze film, garment wrap, refuse and Heavy duty sacks, Builders reel, Co-extrusion, shrink silage, green house and Mulch film...

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous substances:	Not applicable, Inert substance.
Hazardous label(s):	This product is not hazardous
Toxicological characteristics:	This product is not toxic.
Substances present at a concentration below the minimum danger:	Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring to report in this section, in accordance with EU or national regulations.
Other component:	None
3. IDENTIFICATION OF HAZARDS	۹
Risk phrases:	Stable product. It doesn't offer hazard in

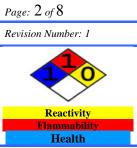
Risk phrases:	Stable product. It doesn't offer hazard in
	its normal handling and storage state.
Skin contact:	Negligible hazard at ambient temperatures
	(-18 to +38 degrees C; 0 to 100 degrees F).
	Exposure to hot material may cause
	thermal burns.
Eye contact:	Particulates may scratch eye surfaces /
	cause mechanical irritation.
Inhalation :	Dust may cause mechanical irritation.
	Negligible hazard at ambient temperature



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(-18 to 38 Deg C; 0 to 100 Deg F) Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Minimal toxicity. Product not classified as hazardous by UNO.

If swallowed: **Other information:**

4. FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist	t, always call a doctor
NEVER induce swallowing in an unconscious person.	
Skin contact :	Wash skin with soap and water.

	For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention. No attempt should be made to remove material from skin or to remove contaminated clothing, as the damaged flesh can be easily torn.
In case of exposure by inhalation:	In case of adverse exposure to vapors and/or aerosols formed at elevated temperatures, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.
In case of splashes or contact with eyes:	This product is an inert solid. If in eye, remove as one would any foreign object. Rinse with plenty of running water. Obtain medical attention if symptoms occur.
In case of swallowing:	There is no known acute effect after over-
Note of physician:	exposure to this product. If swallowed, rinse mouth with water (only if the person is conscious). Obtain medical attention if symptoms occur. Do not induce vomiting.

5. FIRE FIGHTING MEASURES

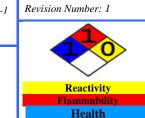
Flammable class:

Flammability Risk 1 (Slight)



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Suitable extinguishing media:

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

Special protective equipment for fire fighting :

Other information:

Use water spray to cool fire exposed surfaces, protect personnel, and extinguish the fire. For small fire, use dry chemical or CO2. For large fire, Use dry chemical powder or alcoholresistant foam.

In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, and Organic acids. Respiratory and eye protection required for fire fighting personnel.

Solid material, may burn at or above the flashpoint, and airborne dust may explode if ignited. If thermally decomposed, flammable/toxic gases may be released. Toxic gases will form upon combustion. Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge

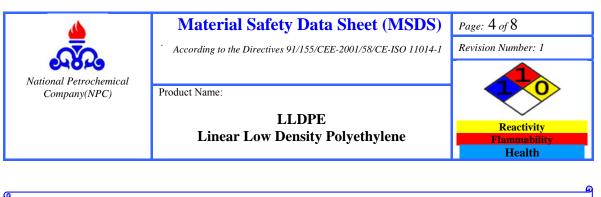
6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Environmental precautions: Methods for cleaning up and disposal:

Other information:

Avoid creating dusty conditions and prevent wind dispersal. Use suitable protective equipment .Keep away from sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. No special measures required. Small spill and leak - Vacuum or sweep up material and place in a designated lapelled waste container. Clean up affected area with a large amount of water. Large spill and leak - Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. Recover the spilled material and place in suitable containers for recycle or disposal.



7. HANDLING AND STORAGE

The regulations relating to storage premises apply to workshop where the product is handled Handling: Use with adequate ventilation. Local

Use with adequate ventilation. Local
exhaust ventilation should be provided.
Avoid creating dusty conditions and
prevent wind dispersal. Use explosion-proof
electrical (ventilating, lighting and material
handling) equipment. Take measures
against static discharge. Keep away from
sources of ignition.
Store in a fireproof location. Keep away
from incompatible materials and avoid
specific conditions. Containers should be
grounded. Take precautionary measures
against electrostatic discharges. Do not
stack more than 2 pallets high in
connection with risk of falling over. Do not
stack pallets with grades containing slip or
Anti-Block (AB) additives. Protect from
(sun) light. Keep in a dry place.
Unsuitable : mild steel
Suitable : stainless steel / Aluminum /
polyethylene

Storage:

8. EXPOSURE CONTROLS/PERSONAL PROT	TECTION
Exposure limit values:	5 mg/m3 (respirable dust), and 10 mg/m3 (total inhalable dust) based on the OSHA PEL for nuisance dust. The recommended permissible exposure levels indicated above reflect the levels revised by OSHA in 1989 o in subsequent regulatory activity. NPC recommends that the lower exposure levels be observed as reasonable worker protection.
Exposure controls:	Local exhaust ventilation of process equipment may be needed to control particulate exposures to below the recommended exposure limit.
Personal protective equipment:	For open systems at ambient temperature (- 18 to 38 degrees C) where contact is likely, wear safety glasses with side shields. Where contact may occur with hot material, wear thermal resistant gloves, arm protection, and a face shield.

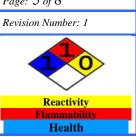


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Eye protection: Respiratory protection: Hand protection:

Skin and body protection: Health measures: Environmental exposure controls: Safety glasses with side shields. Wear dust protection mask P2. When handling hot material, wear heatresistant protective gloves that are able to withstand the temperature of molten product. Working clothes. Not available Plastic pellets are defined as a "significant material" which requires any industrial plant that may expose pellets to storm water to secure a storm water permit. Violations of the rule carry the same penalties as other Clean Water Act violations.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information: Appearance (at 20°C): Colour: **Odour: PH (at 20°C):** Freezing /Melting point (°C): **Boiling point/range (°C):** Flash point (°C): Flammability: Auto-ignition temperature: **Explosive properties: Oxidising properties:** Vapour pressure (at 20°C): **Density (at 20°C):** Bulk density (Kg/M3) Solubility (at 20°C):

Viscosity (40°C): Evaporation rate: Other information: None Solid. (Granular solid. Powder.) **Off-white.** Wax-like when heated, characteristic Not applicable. 125-145 Decomposes. >300 °C >345 °C Flammability Risk 1 (Slight) > 330 °C None None Not available 0.91 to 0.95 g/cm3 480-560 (pellet) , 300-320 (powder) water solubility: Insoluble in cold water solubility in fats: Insoluble Not applicable Not applicable Rapid movement of particles or pellets through transfer lines generates static electricity.

10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions

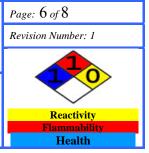
Stability:



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Conditions to avoid:

Material to avoid: Hazardous decomposition products: Temperatures over 650 F (343 C) will lead to resin degradation and decomposition. Keep away from heat, sparks and flame and exposure to (sun) light. Prevent formation of dust clouds. Take measures against static discharge.

Fluorine Strong Oxidizing agents. Highly dependent on temperature and environmental conditions, a variety of decomposition products may be formed, such as low molecular weight hydrocarbons and hydrocarbon oxidation products (acids, ketons, and aldehydes). Also thermal decomposition under condition of limited oxygen supply will give rise to carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Sub chronic – chronic toxicity: Sensibilization: Carcinogenicity: Reproductive effects: Human experience: Other information: - LD₅₀, oral, rat (mg.kg⁻¹): >5000 mg/kg

- LD₅₀, oral, mouse (mg.kg⁻¹): Not Available

 LD₅₀, dermal (mg.kg⁻¹): Not Available None
Not available
Carcinogenic effects are not known.
Reproductive effects are not known.
Not available

During heating and processing of the material small amounts of free monomer may evaporate resulting in airborne concentration that may cause irritating effects of the respiratory tract and nausea.

Occupational Exposure Limit : TWA for total inhalable dust : 10 mg/m3(8 hour) TWA for total respirable dust:5 mg/m3(8 hour)

12. ECOLOGICAL INFORMATION

Ecotoxicity:	No specific ecological data are available for this product.
Bioaccumulative potential:	Effects on nature due to bioaccumulation are not known.
Mobility:	No specific ecological data are available for this product.
Persistence and degradability:	No specific ecological data are available for this product.

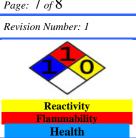


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Other adverse effects:

No specific ecological data are available for this product.

13. DISPOSAL CONSIDERATIONS

Disposal of product:

Disposal of packaging:

Waste must be disposed of in accordance with national and local environmental regulations. Polyethylene bags should be reused in the working area, products transportation or recycled by specialized companies.

14. TRANSPORT INFORMATION

Land transport: **ADR/RID:** Packaging group: Maritime transport: Air transport:

Not established Not established Not applicable Not applicable Not applicable

15. REGULATORY INFORMATION

Hazardous label(s):

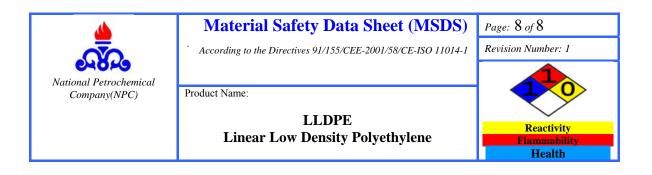
NPCA	-HM	IS - NFPA	- KEY
HEALTH	1	1	4=Severe
FLAMMABILITY	1	1	3=Serious
REACTIVITY	0	0	2=Moderate
			1=Slight
			0=Minimal

Safety phrases: **Risk phrases:**

This product is not hazardous This product is not hazardous

16. OTHER INFORMATION

None



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

Disclaimer of liability:

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