



SAFETY DATA SHEET

(according to EC Regulation No
1907/2006)

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.POLYETHYLENE EGDA-6888, EMDA-6147, EMDA-6200, EPDA-5040, EMDA-8920

Version No: 01

Date: April 2011

1. IDENTIFICATION OF CHEMICAL/SUBSTANCE AND COMPANY/UNDERTAKING

PRODUCT INFORMATION

Product Description High Density Polyethylene
Use of Substance/mixture ... For making Polymers
Chemical Family Natural pelleted thermoplastic polyethylene compound
Manufacturer EQUATE Petrochemical Company (K.S.C.C.)
P.O. Box 9717, Ahmadi 61008, Kuwait
Telephone Number 965-2325 2325

EMERGENCY PHONE NUMBER 965-2326-0246 (24 hours a day)

Email RD_Tech_Ser_Grp@equate.com

2. HAZARDS IDENTIFICATION

Emergency Overview

Polyethylene pellets are non-toxic with minimal odor. Dusts and fumes generated on processing at high temperatures may cause eye, skin and respiratory tract irritation. Fines and dust may create a explosion hazard with air.

POTENTIAL HEALTH EFFECT

SKIN

Polyethylene pellets or granules are abrasive and may cause mechanical skin irritation. Contact with molten or hot polymer will cause thermal burns.

EYE

Dust causes eye irritation, experienced as stinging and discomfort or pain. Hot polymer fumes can cause eye irritation. Contact with molten or hot polymer can cause serious thermal burns including blindness.

INGESTION

May cause choking and gastrointestinal problems.

INHALATION

Fine dust or fumes from hot polymer can cause respiratory irritation.

CHRONIC HEALTH EFFECT

No known chronic health effects. Polyethylene is not listed by OSHA, NTP or IARC as carcinogen

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS#	%W/W	HAZARDS
1-Hexene, polymer with ethene	25213-02-9	99-100	not hazardous
Additives	various	0.1-1.0	not hazardous



4. FIRST AID MEASURES

SKIN CONTACT

For thermal skin burns, remove clothing, any jewelry, and gross debris from the burned area. Leave blisters intact. Wash the area thoroughly with room temperature tap water. Do not use ice. Cover the wounded area with gauze dressing moistened with cool water; keep the dressing moist. Seek medical attention.

INHALATION

Remove to fresh air.

INJECTION

Small amounts may cause choking and gastrointestinal problems. If large amount swallowed, seek immediate medical assistance.

EYE CONTACT

In case of dust contact with eyes, flush thoroughly with water for several minutes. Remove contact lenses, if worn. Seek medical advice if irritation persists.

For thermal eye burns, immediately flush eyes with water and continue washing for several minutes. DO NOT remove contact lenses, if worn. Obtain medical attention without delay, preferably from an ophthalmologist.

5. FIRE-FIGHTING MEASURES

Flash Point: Not applicable

Autoignition temperature: 349° c

Flammable Limits: Not applicable

Combustion Products : Carbon dioxide, carbon monoxide, irritating gases and soot.

General Hazards

Non-combustible, will easily burn under fire conditions. Accumulated fines poses a risk of explosion and hazardous static charges

EXTINGUISHING MEDIA

Apply all-purpose-type foam by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires.

SPECIAL FIRE FIGHTING PROCEDURES

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Firefighters should wear full bunker gear (helmet with face shield, bunker coat, gloves and rubber boots) and a positive pressure NIOSH approved self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES



STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Incase of spills or leak remove all sources of ignition. Avoid generating dusty clouds. Prevent spilled product on floors which can cause slipping hazards. Do not allow release to surface waters. Small spills should be swept or vaccum cleaned and collected for appropriate disposal or recovery. In event of an uncontrollable release the user should determine if the release is reportable under applicable laws and regulations.

CAUTION! Polyethylene pellets on floors are slippery and can cause fall.

7. HANDLING AND STORAGE

HANDLING

This product is for Industrial Use only

General Precaution for Resin Bags

Do not handle bag or liner in presence of flammable vapors.
Do not pull bags from bottom or middle section of stacked bags.
Care must be exercised to keep the bags from contamination.
Follow safe lifting methods while handling loose bags.

General Precautions for Sea Bulk Container

Ensure proper grounding before unloading the sea bulk container.

General Precautions for Polyethylene Resin

Avoid breathing dust and process fumes
Local exhaust ventilation is recommended for control of airborne dust, fumes and vapors, particularly in confined areas.

Other Precautions

Physical handling and processing of this product by pneumatic conveying and grinding, etc., can generate fines and dust particles that can, under certain conditions, pose an explosion hazard. We recommend that the system used be:
(1) equipped with filters of adequate size; (2) operated and maintained in a manner to ensure that no leaks develop; and (3) adequately grounded. We further recommend good housekeeping be practiced throughout the facility.

STORAGE

Store away from flames and oxidizing agents, in a dust-free, cool, dry place with adequate ventilation and absence of direct sunlight. Keep storage temperature preferably below 40° C but not exceeding 48° C.

Pallets should be stacked two high maximum. The upper layer pallets should overlap the middle of the two adjacent bottom pallets in an interlocking position.

For detailed instruction consult EQUATE Petrochemical Company's "Polyethylene Handling and Storage Guide" booklet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION



ENGINEERING CONTROLS

Adequate engineering controls are required to prevent exposure to potentially toxic irritating fumes. Proper ventilation to be employed to remove and keep air borne levels below recommended exposure limits.

PERSONAL PROTECTION

Respiratory Protection

None required; however, use of adequate ventilation is good industrial practice. Adequate engineering controls are required to prevent exposure to potentially toxic irritating fumes.

Hand Protection / Protective Gloves

None required; however, use of gloves is good industrial practice

Eye Protection

None required; however use of eye protection is a good industrial practice. Use dust goggles if high dust concentration is generated.

Skin Protection

None required; however, use of protective clothing is good industrial practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Opaque translucent solid pellets
Odor	Essentially odorless
Melting Point/Range	118 -138° C
Specific Gravity	0.940 - 0.970
Autoflammability	260 - 410° C
Solubility:	Water Insoluble
	Other solvents Soluble to various extents

10. STABILITY AND REACTIVITY



STABILITY: Stable at room temperature
Conditions to Avoid: Prolonged temperature above 250° C
Materials to Avoid: Strong Oxidizing Agents
Incompatible Materials: None
Polymerization: Will Not Occur

Hazardous Decomposition Products:

At processing temperatures, some degree of thermal degradation will occur. Although highly dependent on temperature and environmental conditions, a variety of decomposition products may be present ranging from simple hydrocarbons (methane and propane) to toxic/irritating gases such as carbon monoxide, carbon dioxide, organic acids, ketones, aldehydes and other organic vapors.

11. TOXICOLOGICAL INFORMATION

The product is non-toxic by composition. However, care should be taken to avoid dust or any fumes that may be generated during its processing. Pre-existing eye and respiratory disorders may be aggravated by exposure to product fines.

Reproductive toxicity : No effects known

Mutagenicity : No effects known

Carcinogenicity : No effects known

Sensibilisation : No effects known

12. ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY

Very stable material; does not undergo biological degradation

AQUATIC TOXICITY/ECOTOXICITY

If it enters a water course or sewage works, advise proper authorities of possible floating polymer. This product does not contain nor was it directly manufactured with any Class I or Class II Ozone depleting substances.

Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD(S)

Reclaim the material where possible.

When disposed of, this product is not considered a hazardous waste. Dispose of in accordance with appropriate government and local regulations.

14. TRANSPORT INFORMATION

The material is non-hazardous. It is not regulated for transport by sea (IMO/IMDG), Air (ICAO/IATA) and Road/Rail.

15. REGULATORY INFORMATION



This product is not considered as a "Hazardous Chemical".

United States :TSCA Inventory: This material is listed or exempted

European Community : EINECS : This material is listed or exempted

AUSTRALIA : AICS : This material is listed or exempted

PEOPLE'S REPUBLIC OF CHINA : IECSC: This material is listed or exempted

PHILIPPINES (PICCS): This material is listed or exempted

This is not comprehensive list of applicable regulations. Contact your EQUATE representative for additional information.

FOOD CONTACT STATUS

Specific information on Food Contact Status could be supplied upon request.

16. OTHER INFORMATION

This MSDS has been compiled as guided by European Community Directive 91/155/EEC.

The product is intended for industrial use only. This MSDS and other product literature should be carefully reviewed before using the product. If necessary consult reference works or experts in fire prevention, ventilation and toxicology for proper understanding and utilization of the data in the MSDS. Enforce good housekeeping in your plant.

Specific toxicology tests have not been conducted on this product. Our toxicity evaluation is based on information from similar products, the ingredients, technical literature and/or professional experience.

NFPA Rating

Health : 0 Flammability : 1 Reactivity : 0

List of Abbreviations

ASTM	American Society for Testing and Materials
C.A.S	Chemical Abstract Service
FDA	The U.S. Food and Drug Administration
IATA	International Air Travel Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
IMDG	International Maritime Dangerous Goods
MSDS	Material Safety Data Sheet



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