

SAFETY DATA SHEET

according to US-Regulation 29 CFR 1910.1200 (HCS), as ammended



Polyethylene (HDPE) OP005

Version / Revision
Supersedes Version

2
1.00***

Revision Date
Issuing date

17-May-2021
17-May-2021

SECTION 1: Identification

1.1. Product identifier

Identification of the
substance/preparation

Polyethylene (HDPE)

Synonyms

1-Butene, Polymer with Ethene:
DGDZ-6097 / HMA-016 / DGDZ-6095 / DMDX-6147
1-Hexene, Polymer with Ethene:
DMDZ-6147 / DGDZ-6095 / DGDZ-2400 / DGDZ-6097 / DMDA-6200 /
DMDD-6200 / DMDZ-2400
High Density Polyethylene, Homopolymer:
DMDA-8007 / DMDH-6400 / DMDC-6400***

Product form

Mixture

CAS-No

25087-34-7 (1-Butene, Polymer with Ethene)
25213-02-9 (1-Hexene, Polymer with Ethene)

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

Industrial / Professional use
spec

Industrial
For professional use only
Industrial processing & uses

Identified uses

Uses advised against

None

1.3. Details of the supplier of the safety data sheet

Company/Undertaking
Identification

OQ Plastics L.L.C.
Sohar Industrial Plant
P.O. Box 282
Sohar Oman

OQ Marketing, L.L.C.
PO Box 3568
PC 112 Ruwi, Muscat, Sultanate of Oman
T +968 22144274 / +968 91999088
polymers@oq.com - www.oq.com***

1.4. Emergency telephone number

Emergency telephone number

NCEC +1 202 464 2554
available 24/7

SECTION 2: Hazards identification

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2.1. Classification of the substance or mixture

This mixture is not hazardous in accordance with paragraph (d) of §1910.1200 (GHS-US classification).

OSHA Specified Hazards Not applicable.

2.2. Label elements

Not required according to §1910.1200 (GHS-US labeling).

2.3. Other hazards

Dust can form an explosive mixture in air
Eye mechanical irritation is possible
Polymers are not expected to be hazardous to the environment

SECTION 3: Composition / information on ingredients

3.1. Substances not applicable

3.2. Mixtures

Component	CAS-No	Concentration (%)
1-Butene, Polymer with Ethene	25087-34-7	> 99
1-Hexene, Polymer with Ethene	25213-02-9	> 99
Non-hazardous additives	-	< 1

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

Inhalation

If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Allow the victim to rest.

Skin

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. After contact with the molten product, cool rapidly with cold water. Removal of solidified molten material from skin requires medical assistance.

Eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If

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eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation

Inhalation of vapors may cause respiratory irritation.

Symptoms/effects after skin contact

Risk of thermal burns on contact with molten product.

Symptoms/effects after eye contact

Causes serious eye irritation.

Symptoms/effects after ingestion

Risk of thermal burns on contact with molten product. May be a choking hazard.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard

Burning produces irritating, toxic and noxious fumes. Combustible dust.

Explosion hazard

Dust may form explosive mixture in air. Dust cloud in combination with static electricity can very be explosive.

5.3. Advice for firefighters

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Keep people away from and upwind of fire.

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained

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breathing apparatus. Wear fire/flame resistant/retardant clothing. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Avoid contact with skin, eyes and clothing.

6.1.1. For non-emergency personnel

Protective equipment

Refer to section 8.2.

Emergency procedures

Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment

Refer to section 8.2.

Emergency procedures

Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for containment

Avoid generating dust. Contain and collect as any solid.

Methods for cleaning up

On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

For personal protective equipment see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Ground/bond container and receiving equipment.

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions

Keep only in the original container. Keep container closed when not in use.

Incompatible products

Moisture. Strong oxidizers.

Incompatible materials

Sources of ignition. Direct sunlight.

Storage area

Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Industrial processing & uses

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Exposure limits United States of America

US ACGIH

Component	TWA (mg/m ³)	TWA (ppm)	STEL (mg/m ³)	STEL (ppm)
Dust, general threshold limit value (inhalable fraction) CAS: -	10			
Dust, general threshold limit value (respirable fraction) CAS: -	3			

US OSHA Z-1

Component	Ceiling (mg/m ³)	Ceiling (ppm)	PEL (mg/m ³)	PEL (ppm)	Skin Designation
1-Butene, Polymer with Ethene CAS: 25087-34-7			15 Total dust. 5 Respirable fraction.		
1-Hexene, Polymer with Ethene CAS: 25213-02-9			15 Total dust. 5		

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			Respirable fraction.		
Dust, general threshold limit value (inhalable fraction) CAS: -			15		
Dust, general threshold limit value (respirable fraction) CAS: -			5		

Note

For details and further information please refer to the original regulation.

8.2. Exposure controls

Appropriate Engineering controls

Avoid dispersal of dust in the air (clearing dust surfaces with compressed air). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation. Use spark-/explosion proof appliances and lighting system.

Personal protective equipment

Avoid all unnecessary exposure.

Hand protection

Wear dust impervious gloves. Nitrile rubber. Neoprene/natural rubber. Heat protective impervious gloves when handling molten product.

Eye protection

Chemical goggles or safety glasses. When handling in molten state: Face shield.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material.

Thermal hazard protection

Flame retardant clothing should be used when handling in molten state.

Other information

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance pellets
Colour white, clear

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Odour	slight
Odour threshold	No data available
pH	No data available
Melting point/range	No data available
Boiling point/range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	not flammable
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available

Relative density			
Values	@ °C	@ °F	Method
948 - 965	-	-	-
Solubility	No data available		
log Pow	No data available		
Autoignition temperature	No data available		
Decomposition temperature	No data available		
Viscosity	No data available		

9.2. Other information

Molecular formula	$-(C_4H_8.C_2H_4)_x-$ $-(C_6H_{12}.C_2H_4)_x-$
Oxidizing properties	No data available
Explosive properties	No data available

SECTION 10: Stability and Reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Avoid creating or spreading dust.

10.5. Incompatible materials

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Strong oxidizers. Moisture.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure Eye contact, Ingestion, Inhalation, Skin contact

Acute toxicity				
1-Butene, Polymer with Ethene (25087-34-7)				
Routes of Exposure	Endpoint	Values	Species	Method
Oral	LD50	> 5000 mg/kg	rat	
Dermal	LD50	> 2000 mg/kg	rat	

1-Hexene, Polymer with Ethene (25213-02-9)				
Routes of Exposure	Endpoint	Values	Species	Method
Oral	LD50	> 5000 mg/kg	rat	
Dermal	LD50	> 2000 mg/kg	rat	

1-Butene, Polymer with Ethene, CAS: 25087-34-7

Assessment

Based on available data, the classification criteria are not met for:

Acute oral toxicity

Acute dermal toxicity

For acute inhalation toxicity, no data are available

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

Assessment

Based on available data, the classification criteria are not met for:

Acute oral toxicity

Acute dermal toxicity

For acute inhalation toxicity, no data are available

1-Butene, Polymer with Ethene, CAS: 25087-34-7

Assessment

For skin irritation, no data are available

For eye irritation, no data are available

For respiratory irritation, no data are available

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

Assessment

For skin irritation, no data are available

For eye irritation, no data are available

For respiratory irritation, no data are available

1-Butene, Polymer with Ethene, CAS: 25087-34-7

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Assessment

For skin sensitization, no data are available

For respiratory sensitization, no data are available

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

Assessment

For skin sensitization, no data are available

For respiratory sensitization, no data are available

1-Butene, Polymer with Ethene, CAS: 25087-34-7

Assessment

For subacute, subchronic and prolonged toxicity, no data are available

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

Assessment

For subacute, subchronic and prolonged toxicity, no data are available

1-Butene, Polymer with Ethene, CAS: 25087-34-7

Evaluation

For carcinogenicity, no data are available

For mutagenicity, no data are available

For reproductive toxicity, no data are available

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

Evaluation

For carcinogenicity, no data are available

For mutagenicity, no data are available

For reproductive toxicity, no data are available

1-Butene, Polymer with Ethene, CAS: 25087-34-7

Aspiration toxicity

no data available

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

Aspiration toxicity

no data available

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

1-Butene, Polymer with Ethene, CAS: 25087-34-7

Biodegradation

Not readily biodegradable.

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

Biodegradation

Not readily biodegradable.

12.3. Bioaccumulative potential

Not expected to bioaccumulate

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12.4. Mobility in soil

Low mobility (soil)

12.5. Results of PBT and vPvB assessment

Not required

12.6. Other adverse effects

No data available

Note

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

Section 14.1 - 14.6

ICAO-TI / IATA-DGR Not restricted

IMDG Not restricted

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code not applicable

SECTION 15: Regulatory information

Federal and State Regulations

Components of the product are listed in the quoted regulations. For details please refer to the regulations directly. This list is not exhaustive, please check for other applicable regulations.

Federal Regulations

This product is listed on the TSCA inventory

State Regulations

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1-Butene, Polymer with Ethene, CAS: 25087-34-7

RI RTK List

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

RI RTK List

International Inventories

1-Butene, Polymer with Ethene, CAS: 25087-34-7

AICS (AU)

DSL (CA)

IECSC (CN)

ENCS (6)-18 (JP)

ISHL (6)-18 (JP)

KECI KE-04086 (KR)

PICCS (PH)

TSCA (US)

NZIoC-NZ May be used as single component chemical

TCSI (TW)

1-Hexene, Polymer with Ethene, CAS: 25213-02-9

AICS (AU)

DSL (CA)

IECSC (CN)

ENCS (6)-1594 (JP)

ISHL 9-335 (JP)

KECI KE-13670 (KR)

PICCS (PH)

TSCA (US)

NZIoC-NZ May be used as single component chemical

TCSI (TW)

SECTION 16: Other information

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Hazard Rating Systems

NFPA (National Fire Protection Association)

Health Hazard 0

Fire Hazard 1

Reactivity 0

HMIS (Hazardous Material Information System)

Health Hazard 0

Flammability 1

Physical Hazard 0

Abbreviations

A table of terms and abbreviations can be found under the following link:

http://echa.europa.eu/documents/10162/13632/information_requirements_r20_en.pdf

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Training advice

For effective first-aid, special training / education is needed.

Sources of key data used to compile the datasheet

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <https://echa.europa.eu/en/information-on-chemicals/cl-inventory-database>. European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.

Further information for the safety data sheet

Changes against the previous version are marked by ***. Observe national and local legal requirements. For more information, other safety data sheets or technical data sheets please consult the OQ homepage (www.oq.com). The use of a comma in section 3 and section 7 to 12 is the same as a period.

Safety Data Sheet prepared by:

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D-40789 Monheim
Germany.

Disclaimer

This Information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing and specific property of the product.

End of Safety Data Sheet