



ASPC

Technical / Process Optimization*Doc Name:***SDS**
*for MD/HD Polyethylene (Various Grades)**Page: 1 of 6**Doc No.***TEC-PRO-SDS-001***Rev: 1***Safety Data Sheet**Complies with:
ISO 11014-1: Safety data sheet for chemical products.

Revision date: Sep.2017

1. Product and company identification

Product name Polyethylene – MD/HD

Chemical name Polyethylene (Medium/High density)

Manufacturer Arya Sasol Polymer Company
Pars Special Economic Energy Zone
Assaluyeh
Islamic Republic of Iran

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The following product from Arya Sasol are covered under this SDS:

Base Name	HCH 5020	HCH 5520	HCH5510	HCH 5110	HCM 4265	MCH 3713	MCH 3313	MCH3820
Grade								
Sales Part	HBM5020	HBM5520	HBM5510	HF15110	HBM4265	MFI3713	MFI3313	MFI3820
	HB5020	HB5520	HB5510	HF5110	HB4265	MF3713	MF3313	MF3820

2. Composition/Information on ingredients

This chemical product is a preparation.

Common chemical name Medium/High density polyethylene

Formula (CH₂ - CH₂)_n

Generic name Polyolefin's

CAS number CAS 25213-02-9

Synonym(s) MD/HD PE

Components contributing to the hazard: None

Additional information can contain additives.



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The molten product adheres to the skin and causes burns.

Spilled material may present a slipping hazard.

- Classification system

This product is, according to EEC directives 1999/45, 67/548, 76/769 and following amendments, not classified as hazardous.

4. First-Aid measures**- General information**

At room temperature the product is neither an irritant nor gives off hazardous vapours.

The measures listed below apply to critical situations (Fire, incorrect process conditions).

- After inhalation

In case of excessive inhalation of fumes move the person to fresh air. Call for medical help.

- After skin contact

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product away from the skin.

Seek immediate medical advice.

- After eye contact

Rinse opened eye for several minutes under running water.

- After swallowing

No specific measures have to be taken if the product is swallowed.

5. Fire-fighting measures**- Suitable extinguishing agents**

Water haze

Foam

Chemical powder

- For safety reasons unsuitable extinguishing agents

Water jet.

- Special hazards caused by the material, its products of combustion or resulting gases:

In case of fire it can release:

Water (H₂O), carbon dioxide (CO₂), and when lacking oxygen (O₂), carbon monoxide (CO)

The products of the burning are dangerous.

- Protective equipment:

Use a mask with universal filter.

Use self-contained breathing apparatus within confined rooms.

- Additional information Heat value: 12.2 kWh/kg**6. Accidental release measures****- Person-related safety precautions:**

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Particular danger of slipping on leaked/spilled product.

See point 8

- Measures for environmental protection:

No special measures required.

See points 12 and 13.

- Measures for cleaning/collecting:

Recycle product or dispose properly.

See point 13

- Additional information:

Collect spilled polymer: It could cause falls (Danger of slipping).

7. Handling and storage

- Handling

- Information for safe handling:

No special requirements necessary, if handled at room temperature.

When bringing the material to processing temperatures gases might develop, forming:

ethylene and alkenes of higher molecular weight.

traces of formaldehyde and acryl aldehyde

traces of acids (Formic acid, acetic acid)

Provide appropriate ventilation for such processing conditions.

Take precautionary measures against explosion risks, as all types of polymers may develop dust during transporting or grinding of granules.

Prevent formation of dust.

- Storage

- Requirements to be met by storerooms and containers:

Take precautionary measures to prevent the formation of static electricity.



Do not smoke.

Ground equipment electrically.

Open flames prohibited.

- Information about storage in one common storage facility: Not required.

- Further information about storage conditions:

Protect from heat and direct sunlight.

Store under dry conditions.

Do not stack up the octabins.

- Specific applications For safe stacking follow the storage recommendations specific for this product

8. Exposure controls/personal protection

- Additional information about design of technical systems:

No further data; see item 7.

- Components with limit values that require monitoring at the workplace:

Not required.

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- Additional exposure limit values for possible processing dangers:

64-18-6 formic acid

WEL () Long-term value: 9.6 mg/m³, 5 ppm

50-00-0 formaldehyde

WEL () Short-term value: 2.5 mg/m³, 2 ppm

Long-term value: 2.5 mg/m³, 2 ppm

107-02-8 acryl aldehyde

WEL () Short-term value: 0.7 mg/m³, 0.3 ppm

Long-term value: 0.23 mg/m³, 0.1 ppm

- Additional information:

Void

- Personal protective equipment

- General protective and hygienic measures

Do not eat, drink or smoke while working.

- Breathing equipment:

Use breathing protection in case of insufficient ventilation.

- Protection of hands:

Heat resistant gloves

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:

Not required.



9. Physical and chemical properties

- General Information

Form:

Pellets

Colour:

Neutral

Various colours

Odour:

Nearly odourless

- Change in condition

Melting point/Melting range: 50-140°C

Boiling point/Boiling range: Not applicable

- Flash point:

Not applicable (see attachment to guideline 92/69/EEC, A.9)

- Ignition temperature:

> 360°C



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Technical / Process Optimization*Doc Name:***SDS**
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Product is not explosive.

See point(s) 7.

- Density at 20°C0.9-0.97 g/cm³**- Solubility in / Miscibility with****Water:** Insoluble**- Additional information**

Soluble in boiling, aromatic chlorinated solvents.

10. Stability and reactivity**- Thermal decomposition / conditions to be avoided:**

The product is stable when handled and stored under normal conditions.

Decomposes over 360 °C.

- Dangerous reactions:

No dangerous reactions known

- Dangerous products of decomposition:

No hazardous decomposition products known at room temperature.

11. Toxicological information**- Acute toxicity:****- Primary irritant effect:****- on the skin:** No irritant effect.**- on the eye:** No irritant effect.**- Sensitization:** No sensitizing effect known.**- Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. Ecological information**- Information about elimination (persistence and degradability):****- Other information:**

The product is not biodegradable.

- Behavior in environmental systems:**- Mobility and bioaccumulation potential:**

Floats on water.

There is no bioaccumulation.

- General notes:

The product is not toxic, small particles can have physical effects on water and soil organisms.

13. Disposal Consideration**- Product:****- Recommendation**

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Reuse or recycle if possible.

Disposal through controlled incineration or authorized waste dump.

- **European waste catalogue** 070213

- **Uncleaned packagings:**

Recommendation: Disposal must be done according to official regulations.

14. Transport information

- **Transport/Additional information:**

According to national and international guidelines, which regulate the road-, rail-, air- and sea transport, this product is classified as not dangerous.

15. Regulatory information

- **Designation according to EC guidelines:**

Not classified

16. Other information

The information supplied has been based upon the current level of information available, for the purpose of specifying the requirements regarding environment, health and safety in conjunction with the product. They are not to be interpreted as a warranty for specific product characteristics. Arya sasol polymer company takes no responsibility for inappropriate use, processing and handling by purchasers and users of the product.

- **Bibliography:**

- Directive EEC 67/548 and following adoptions

- Directive 1999/45/EC, as amended

- Directive 2001/58/EC

- RTECS (Registry of toxic effects of chemical substances 1985-1986 edition)

- EINECS/ELINCS

- Frostling, Hof, Jacobson, Pfaffli, Zitting. "Thermal decomposition products from plastics", -Polyethylene and styrene (1982)

- * **Data compared to the previous version altered.** REACH version