



Safety Data Sheet

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| | |
|--|---|
| 1.1 Product identifier | |
| Trade Name | BPD 4020 |
| Product Name | Ethylene Hexene 1 Copolymer |
| CAS No. | 25213-02-9 |
| EINECS No. | None assigned. |
| REACH Registration No. | None assigned (Polymer). |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | |
| Identified use(s) | Industrial use. |
| Uses advised against | None known. |
| 1.3 Details of the supplier of the Safety Data Sheet | |
| Company Identification | INEOS Olefins & Polymers Europe Clayhill House Beechen Lane Lyndhurst Hampshire S043 7DD United Kingdom psnohreg@ineos.com |
| E-Mail (competent person) | |
| 1.4 Emergency telephone number | |
| Carechem 24 | +44 1235 23 96 70 |

SECTION 2: HAZARDS IDENTIFICATION

| | |
|---|---|
| 2.1 Classification of the substance or mixture | |
| Regulation (EC) No. 1272/2008 (CLP) | Not classified as dangerous for supply/use. |
| 2.2 Label elements | According to Regulation (EC) No. 1272/2008 (CLP) |
| Product Name | Ethylene Hexene 1 Copolymer |
| Hazard pictogram(s) | None. |
| Signal word(s) | None. |
| Hazard statement(s) | None. |
| Precautionary statement(s) | None. |
| 2.3 Other hazards | The molten form can cause thermal burns if in contact with skin. Eye Contact: Dust may cause irritation. |
| 2.4 Additional Information | None. |



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

EC Classification No. 1272/2008

| Ingredient(s) | %W/W | CAS No. | EC No. | REACH Registration No. | Hazard pictogram(s) and Hazard statement(s) |
|--------------------------------|------|----------------|---------------|----------------------------|--|
| Ethylene Hexene 1 Copolymer | >99 | 25213-02- 9 | None assigned | None assigned (Polymer) | None |

3.2 Additional Information

None.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, obtain medical attention.

Skin Contact

Molten material can cause severe burns. Do NOT try to peel molten material from the skin. Cool rapidly with water.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, obtain medical attention. Rinse mouth. Seek medical treatment.

Ingestion

The molten form can cause thermal burns if in contact with skin.

4.2 Most important symptoms and effects, both acute and delayed

Eye Contact: Dust may cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable Extinguishing Media

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Decomposition products: Carbon monoxide, Carbon dioxide.

5.3 Advice for firefighters

Do not breathe fumes/vapour from heated product. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation. Caution - spillages may be slippery. Wear protective gloves/protective clothing/eye protection/face protection.
- 6.2 Environmental precautions** Do not allow to enter drains, sewers or watercourses.
- 6.3 Methods and material for containment and cleaning up** Sweep up spilled substance. Collect spillage. Use vacuum equipment for collecting spilt materials, where practicable. Transfer to a container for disposal.
- 6.4 Reference to other sections** See Section: 8, 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Ensure adequate ventilation. Take precautionary measures against static discharge. Avoid accumulation of dust. Avoid contact with heated or molten product. Wear protective gloves/protective clothing/eye protection/face protection. See Section: 8. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.
- 7.2 Conditions for safe storage, including any incompatibilities**
 Storage Temperature: Ambient.
 Storage Life: Stable under normal conditions.
 Incompatible materials: Strong oxidising agents.
- 7.3 Specific end use(s)** Industrial use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
8.1.1 Occupational Exposure Limits

| SUBSTANCE | CAS No. | LTEL (8 hr TWA ppm) | LTEL (8 hr TWA mg/m ³) | STEL (ppm) | STEL (mg/m ³) | Note |
|-----------------------------|------------|---------------------|------------------------------------|------------|---------------------------|---------------------------|
| Ethylene Hexene 1 Copolymer | 25213-02-9 | - | 10 | - | - | Inhalable Dust: UK WEL |
| | | - | 10 | - | - | Inhalable Dust: US ACGIH |
| | | - | 4 | - | - | Respirable Dust: UK WEL |
| | | - | 3 | - | - | Respirable Dust: US ACGIH |

WEL: Workplace Exposure Limit (UK HSE EH40)
 ACGIH: American Conference of Industrial Hygienists

- 8.1.2 Biological limit value** Not established.
- 8.1.3 PNECs and DNELs** Not established.

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8.2 Exposure controls

8.2.1 Appropriate engineering controls

Local exhaust recommended.

8.2.2 Individual protection measures, such as personal protective equipment

Eye/face protection



Wear suitable eye/face protection. Wear eye protection with side protection (EN166).

Skin protection (Hand protection/ Other)



Wear impervious gloves (EN374).

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment. A suitable dust mask or dust respirator with filter type P (EN143 or EN405) may be appropriate.

Thermal hazards

When dealing with heated material: Wear insulating gloves EN407 (heat).

8.2.3 Environmental exposure controls

No special measures are required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|--|-------------------------------|
| Appearance | Crystalline powder/ Granules. |
| Colour | Off-white. |
| Odour | Odourless. |
| Odour Threshold | Not established. |
| pH | Not applicable. |
| Melting Point/Freezing Point | 105 - 125 °C |
| Initial boiling point and boiling range | Not available. |
| Flash point | >300 °C |
| Evaporation rate | Not applicable. |
| Flammability (solid, gas) | Non-flammable. |
| Upper/lower flammability or explosive limits | Not applicable. |
| Vapour pressure | Not applicable. |
| Vapour density | Not applicable. |
| Density | <1 |
| Solubility(ies) | Insoluble. |
| Partition coefficient: n-octanol/water | Not applicable. |
| Auto-ignition temperature | >350 °C |
| Decomposition Temperature | Not available. |
| Viscosity | Not applicable. |
| Explosive properties | Not explosive. |
| Oxidising properties | Not oxidising. |

9.2 Other information

None.



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SECTION 10: STABILITY AND REACTIVITY

| | |
|--|---|
| 10.1 Reactivity | Upon prolonged heating above 300 °C decomposition products may be released. High concentrations of vapour may be irritant to the respiratory tract. |
| 10.2 Chemical stability | Stable under normal conditions. |
| 10.3 Possibility of hazardous reactions | Dust may form explosive mixtures with air. |
| 10.4 Conditions to avoid | None anticipated. |
| 10.5 Incompatible materials | Strong oxidising agents. |
| 10.6 Hazardous Decomposition Product(s) | Carbon monoxide, Carbon dioxide. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|--|--|
| 11.1 Information on toxicological effects | |
| Acute toxicity | Low acute toxicity. |
| Skin corrosion/irritation | Non-irritant. The molten form can cause thermal burns if in contact with skin. |
| Serious eye damage/irritation | Dust may cause irritation. |
| Respiratory or skin sensitization | It is not a skin sensitiser. |
| Germ cell mutagenicity | There is no evidence of mutagenic potential. |
| Carcinogenicity | No evidence of carcinogenicity. |
| Reproductive toxicity | Not classified. |
| STOT - single exposure | None anticipated. |
| STOT - repeated exposure | None anticipated. |
| Aspiration hazard | Not classified. |
| 11.2 Other information | None. |

SECTION 12: ECOLOGICAL INFORMATION

| | |
|--|--|
| 12.1 Toxicity | Low toxicity to aquatic organisms. |
| 12.2 Persistence and degradability | The product is not biodegradable. |
| 12.3 Bioaccumulative potential | The product has no potential for bioaccumulation. |
| 12.4 Mobility in soil | Insoluble in water. The product is predicted to have low mobility in soil. |
| 12.5 Results of PBT and VPvB assessment | Not classified as PBT or vPvB. |
| 12.6 Other adverse effects | None. |

SECTION 13: DISPOSAL CONSIDERATIONS

| | |
|-------------------------------------|---|
| 13.1 Waste treatment methods | Recover or recycle if possible. Bury on an authorised landfill site or incinerate under approved controlled conditions. |
| 13.2 Additional Information | Disposal should be in accordance with local, state or national legislation. |



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SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous for transport.

| | | |
|------|---|-----------------|
| 14.1 | UN number | Not applicable. |
| 14.2 | UN Proper Shipping Name | Not applicable. |
| 14.3 | Transport hazard class(es) | Not applicable. |
| 14.4 | Packing Group | Not applicable. |
| 14.5 | Environmental hazards | Not applicable. |
| 14.6 | Special precautions for user | Not applicable. |
| 14.7 | Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |

SECTION 15: REGULATORY INFORMATION

| | | |
|--------|---|----------------|
| 15.1 | Safety, health and environmental regulations/legislation specific for the substance or mixture | |
| 15.1.1 | EU regulations | |
| | Authorisations and/or restrictions on use | |
| | Candidate List of Substances of Very High Concern for Authorisation | Not listed. |
| | REACH: ANNEX XIV list of substances subject to authorisation | Not listed. |
| | REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | Not listed. |
| | Community Rolling Action Plan (CoRAP) | Not listed. |
| 15.1.2 | National regulations | Not available. |
| 15.2 | Chemical Safety Assessment | Not available. |

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

| | |
|------|--|
| LTEL | Long Term Exposure Limit |
| STEL | Short Term Exposure Limit |
| DNEL | Derived No Effect Level |
| PNEC | Predicted No Effect Concentration |
| PBT | Persistent, Bioaccumulative and Toxic |
| vPvB | very Persistent and very Bioaccumulative |

| | |
|-------------------------------|-------------------------|
| Date of Issue | 30/09/2016 |
| Date of Previous Issue | 23/12/2010 |
| Prepared by | Product Stewardship NOH |



Safety Data Sheet

Disclaimer

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfil his obligations regarding the use of hazardous products. This information is not exhaustive. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. This is solely his responsibility.

Annex to the extended Safety Data Sheet (eSDS)

Not necessary/provided because the substance is not classified hazardous.