

SAFETY DATA SHEET

Revision: 11 Mar. 2016

Version number: 1.0

SECTION 1: Identification of the substance/mixture and company/undertaking

- 1.1 Product identifier** IUPILON
MB2213R 9001
- 1.2 Other means of identification** Polycarbonate resin component
- 1.3 Relevant identified uses of the substance or mixture and uses advised against** Plastic for injection or extrusion molding.
Uses advised against: not available.
- 1.4 Details of the supplier of the safety data sheet** MEP Europe GmbH
Willstätter Strasse 30
40549 Düsseldorf
Germany
Tel +49-(0)201 211-52054-0
Fax +49-(0)201 211-52054-272
E-mail info.safety@mepeu.com
- Non-EU supplier:* Mitsubishi Engineering-Plastics Corp.,
Environment and Quality Assurance Department,
Shiodome Sumitomo-Bldg. 25F,
9-2, Higashi-shinbashi 1-Chome, Minato-ku, Tokyo 105-0021, Japan;
Tel +81-3-6274-9060; Fax +81-3-6274-9085.
E-mail info-EQA@notesgw.m-ep.co.jp
- 1.5 Emergency telephone number** +31 46 70 22043/ +31 46 70 22044 (business hours GMT+1).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Not classified
This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Pictogram None.
Signal word None.
Hazard statements None.
Precautionary statements None.
Supplemental information Not available.

2.3 Other hazards Dust may produce explosive mixture with air.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures ^{a,b}

| Other components | Conc. (wt%) | EC No. | CAS No. | Reg. No. | Classification |
|------------------|-------------|-----------|-----------|----------|----------------|
| | | | | | 1272/2008 |
| Carbon black | 0.1–1 | 215-609-9 | 1333-86-4 | NA | Not classified |

^a NA: not available.^b See Section 16 'Other information' for full text of the H-phrases.

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 experiencing respiratory symptoms, call a doctor. |
| Skin | If dust, or vapour, or condensation products from heated product, contacts the skin, wash off well with soap and water. If skin irritation or rash occurs, get medical attention. Launder clothing before re-use. If molten resin contacts the skin, immediately cool with plenty of water and seek medical treatment. |
| Eye | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. |
| Ingestion | Rinse mouth with water, and give milk or water to drink. Call a poison centre or doctor if you feel unwell. Do not induce vomiting, unless instructed by medical personnel. |

4.2 Most important symptoms and effects, both acute and delayed Dust from processing, and vapour from heated resin, may irritate the eyes, skin and respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed Treat symptoms as they occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media

| | |
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| Suitable | Water spray and foam chemical extinguishers are recommended. |
| Unsuitable | Carbon dioxide gas and dry chemicals lack cooling capacity, with the possibility of re-ignition. |

5.2 Special hazards arising from the substance or mixture Not classified as flammable, but is a combustible thermoplastic material which will melt and drip when ignited.
During a fire will produce strong heat, black smoke, and toxic gases,

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including carbon dioxide, carbon monoxide and traces of aliphatic and aromatic hydrocarbons, aldehydes, acids, phenol and phenol derivatives.

Dust may produce explosive mixture with air.

- 5.3 Advice for firefighters** Remove containers from fire or cool them with water spray. Firefighters should wear an approved self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** For large spills, wear full personal protection. Keep unauthorised personnel from the spillage area. May cause slip hazard. Ventilate area and avoid creating airborne dust. Take precautionary measures against static discharge and use non-sparking equipment. Follow prescribed procedures for responding to large spills and reporting to authorities.
- 6.2 Environmental precautions** Prevent product from entering water courses or drainage system.
- 6.3 Methods and material for containment and cleaning up** Clean up spill as soon as possible.
For small quantities, wipe off with cloth or paper, and wash affected area with water and detergent.
For large quantities, carefully sweep up or collect using vacuum cleaner. Wash contaminated surfaces with water and detergent, and collect washings for safe disposal.
Place waste in a container for disposal.
- 6.4 Reference to other sections** For recommended personal protective equipment, see Section 8.
For disposal considerations, see Section 13.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** Avoid skin and eye contact, and inhalation of any dust, or vapour during heat processing. Use protective measures described in Section 8. Use only in a well-ventilated area. Wash hands after use.
Dust that develops from processing may cause dust explosion hazard. Always clean up dust. Keep away from sources of ignition. Use only non-sparking equipment.
When processing molten resin, use protective equipment to prevent burns. In order to avoid hazardous decomposition, purged plastics should be cut into small, flat forms to allow rapid cooling. Do not allow molten resin to remain in container at elevated temperature for long periods.
- 7.2 Conditions for safe storage, including any incompatibilities** Avoiding direct sunlight. To prevent fire, keep away from heat, flame, and sources of ignition.
- 7.3 Specific end use(s)** Not available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters**

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| EU limit values | None. |
| UK limit values | Carbon black: WEL: 8 h TWA, 3.5 mg/m ³ ; 15 min STEL, 7 mg/m ³ . |
| Monitoring procedure | BS EN 14042:2003; Workplace Atmospheres; Guide for the Application and Use of Procedures for the Assessment of Exposure to Chemical and Biological Agents, or specific national equivalent. |
| Other: human health (DNELs, DMELs) | Carbon black: DNEL: worker, long-term exposure, systemic effects, inhalation, 2 mg/m ³ ; worker, long-term exposure, local effects, inhalation, 2 mg/m ³ . |
| Other: environmental (PNEC) | Carbon black: PNEC: freshwater, 5 mg/L. |

8.2 Exposure controls

| | |
|---------------------------------|--|
| Engineering controls | Good general ventilation is recommended for handling the product. For processing, where dust or vapour might be formed, local exhaust ventilation or use in a closed system is recommended. |
| Personal protective equipment | The need for personal protective equipment should be based on a workplace risk assessment for the particular use. Avoid skin and eye contact by wearing chemical resistant gloves and eye protection. Where more extensive contact may occur, wear protective clothing (eg apron, overalls). During processing, if exposure to dust or vapours is possible, wear a dust mask or organic vapour mask. When handling a molten resin, wear heat-resistant gloves and clothing to prevent burns. PPE should be to national standards. Consult manufacturers concerning breakthrough times. |
| Environmental exposure controls | Not available. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|-----------------------------|---------------------------------|
| Appearance | Pellet |
| Odour | None |
| Odour threshold | Not available |
| pH | Not available |
| Melting/freezing point | Not available |
| Initial boiling point/range | Not available |
| Flash point | >522 °C; ignition point >550 °C |
| Evaporation rate | Not available |
| Flammability (solid, gas) | Combustible |
| Flamm. or expl. limits | Not available |
| Vapour pressure | Not available |

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| Vapour density | Not available |
| Relative density | 1.14 |
| Solubilities | Insoluble in water |
| Partition coeff. (K_{ow}) | Not available |
| Auto-ignition temp. | Not available |
| Decomposition temp. | 380 °C |
| Viscosity | Not available |
| Explosive properties | Not available |
| Oxidising properties | Not available |
| 9.2 Other information | Not available |

SECTION 10: Stability and reactivity

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| 10.1 Reactivity | Not available. |
| 10.2 Chemical stability | Stable under recommended storage and handling conditions. |
| 10.3 Possibility of hazardous reactions | No hazardous polymerisation. |
| 10.4 Conditions to avoid | High temperatures, sources of ignition, and strong sunlight. |
| 10.5 Incompatible materials | Strong acids, alkalis, or oxidizing agents. |
| 10.6 Hazardous decomposition products | Smoldering or incomplete combustion leads to the formation of toxic gases, including carbon dioxide, carbon monoxide and traces of aliphatic and aromatic hydrocarbons, aldehydes, acids, phenol and phenol derivatives. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

| | |
|-----------------------------------|--|
| Acute toxicity | Not classified due to lack of data. |
| Skin corrosion/irritation | Not classified due to lack of data. |
| Serious eye damage/irritation | Not classified due to lack of data. |
| Respiratory or skin sensitisation | Not classified due to lack of data. |
| Germ cell mutagenicity | Not classified due to lack of data. |
| Carcinogenicity | Not classified due to lack of data. Carbon black: classified by IARC as Group 2B: possibly carcinogenic to humans; Deutsche Forschungsgemeinschaft (DFG) Category 3B: substances for which in vitro or animal studies have yielded evidence of carcinogenic effects that is not sufficient for classification of the substance in one of the other categories (inhalable fraction). |

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| | |
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| Reproductive toxicity | Not classified due to lack of data. |
| STOT-single exposure | Not classified due to lack of data. |
| STOT-repeated exposure | Not classified due to lack of data. |
| Aspiration hazard | Not classified due to lack of data. |

SECTION 12: Ecological information

| | |
|---|---|
| 12.1 Toxicity | Not available. |
| 12.2 Persistence and degradability | Not expected to be readily biodegradable. |
| 12.3 Bioaccumulative potential | Not expected to bioaccumulate. |
| 12.4 Mobility in soil | Not available. |
| 12.5 Results of PBT and vPvB assessment | Not available. |
| 12.6 Other adverse effects | Not available. |

SECTION 13: Disposal considerations

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|------------------------------|---|
| 13.1 Waste treatment methods | Incineration or landfill may be suitable for this product. Disposal via the drains is not recommended. Disposal must be in accordance with current national and local regulations. Chemical residues generally count as special waste. General EU requirements are given in Directive 2008/98/EC. |
|------------------------------|---|

SECTION 14: Transport information

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|--|---|
| 14.1 UN Number | Not classified as dangerous goods for transport. |
| 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 classified as marine pollutant/environmentally hazardous. |
| 14.6 Special precautions for user | Not available. |
| 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture** No additional information.
- 15.2 Chemical safety assessment** Not available.
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SECTION 16: Other information

- Revisions** This SDS is the 1.1 version in EU format, using classification according to the CLP Regulation.
Version 1.0: 1 Apr. 2015
- Abbreviations** DNEL, derived no-effect level; DMEL, derived minimum effect level; IARC, International Agency for Research on Cancer; PBT, persistent, bioaccumulative, and toxic; PNEC, predicted no-effect concentration; TWA, time-weighted average; vPvB, very persistent, very bioaccumulative.
- References** Search for chemicals; available at the European Chemicals Agency website: <http://echa.europa.eu/>.
- Basis of classification** The mixture is self-classified on the basis of available information on the ingredients.
- List of hazard statements** None.

Disclaimer: The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.