

Magma UltraNuvo MMA Asphalt Primer
[Part.1 Resin | Part.2 Catalyst]



SAFETY DATA SHEET – Part.1

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 453/2010

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

1.1. Product identifier

| | |
|-------------------|---|
| Product Name | Magma UltraNuvo MMA Asphalt Primer |
| Product Inclusion | Part.1 of this document covers the UltraNuvo range. Resin only. |
| Container Size | Variable |

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

| | |
|----------------------|--|
| Identified Uses | Asphalt priming |
| Uses advised against | No specific uses advised against are identified. |

1.3. Details of the supplier of the safety data sheet

| | |
|----------|--|
| Supplier | Meon Ltd. Railside Northharbour Spur Portsmouth PO6 3TU +44 (0) 23 9220 0606 mail@meonuk.com |
|----------|--|

1.4. Emergency Telephone Number

| | |
|---------------------|----------------------|
| Emergency telephone | +44 (0) 808 118 1922 |
|---------------------|----------------------|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

| | |
|---|---|
| Classification according to Regulation (EC) No. 1272/2008, GB CLP | Flam. Liq. 2; H225 Skin Irrit. 2 H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 |
|---|---|

2.2. Label Elements

| | |
|--------------------|--------------|
| Hazard pictograms: | GHS02, GHS07 |
|--------------------|--------------|



| | |
|--------------|--------|
| Signal word: | Danger |
|--------------|--------|

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Hazardous component(s) to be indicated on label Methyl methacrylate, 1,4-Butandioldimethacrylate, ethyl methacrylate

Hazard statements:
H225: Highly flammable liquid and vapour.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H335: May cause respiratory irritation.

Precautionary statements:
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization: - Solution of an acrylic resin in (Meth-) acrylacidester

Hazardous ingredients:

| Chemical identity: | CAS No. EC No. Index No. Reach No. | Classification | Concentration |
|----------------------------------|--|--|-------------------------|
| Methyl methacrylate | CAS No.: 80-62-6 EC-No.: 201-297-1 Index-No.: 607-035-00-6 REACH No.: 01-2119452498-28-XXXX | Flam. Liq. 2; H225 STOT SE 3; H335 Skin Irrit. 2; H315 Skin Sens. 1; H317 GHS02 GHS07 Dgr | 55.0 – 60.0 % by weight |
| 1,4-Butandioldimethacrylate | CAS No.: 2082-81-7 EC-No.: 218-218-1 REACH No.: 01-2119967415-30-XXXX | Skin Sens. 1; H317 | 1.0 – 5.0 % by weight |
| 1,1'-(p-Tolylimino)dipropan-2-ol | CAS No.: 38668-48-3 EC-No.: 254-075-1 REACH No.: 01-2119980937-17-XXXX | Acute Tox. 2; H300 Eye Irrit. 2; H319 Aquatic Chronic 3; H412 | 0.1 – 1.0 % by weight |
| ethyl methacrylate | CAS No.: 103-11-7 EC-No.: 203-080-7 Index-No.: 607-107-00-7 REACH No.: 01-2119453158-37-XXXX | Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315 Skin Sens. 1; H317 GHS07 Wng | 0.1 – 1.0 % by weight |

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SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

| | |
|----------------------|--|
| General | Move out of dangerous area. Take off all contaminated clothing immediately. Do not leave the victim unattended. Show this safety data sheet to the doctor in attendance. |
| If inhaled: | Move to fresh air. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance. |
| Skin contact: | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation occurs, get medical advice/attention. |
| Eye contact: | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| If swallowed: | Rinse mouth. Do Not include vomiting. Call a physician immediately |

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

No data available

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

Immediate medical attention: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--|--|
| Suitable extinguishing media | Carbon dioxide (CO ₂), Foam, Water spray, Dry powder |
| Extinguishing media which must not be used for safety reasons | High volume water jet |

5.2. Special hazards arising from the substance or mixture.

| | |
|--|---|
| Special exposure hazards arising from the substance or preparation. | Violent polymerization may be caused by: Extremes of temperature and direct sunlight. Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health. |
|--|---|

5.3. Advice for firefighters

| | |
|---|--|
| Special protective equipment for firefighting. | In the event of fire, wear self-contained breathing apparatus. |
| Additional information on firefighting | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not allow run-off from firefighting to enter drains or water courses. |

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Vapours are heavier than air and may spread along floors. Use personal protective equipment.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3. Methods and material for containment and cleaning up.

Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly.

6.4. Reference to other sections

Disposal considerations, see also section 13.

6.5. Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions on safe handling

Advice on safe handling

Processing may lead to evolution of flammable volatiles. In case of insufficient ventilation, wear suitable respiratory equipment.
Handle and open container with care. Avoid contact with skin and eyes.

Precautions

Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8. Observe label precautions.

7.2. Conditions for safe storage, including any incompatibilities.

Storage space and container requirements

Storage must be in accordance with the BetrSichV (Germany).
Keep in a cool, well-ventilated place.
Keep in properly labelled containers. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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Recommended storage temperature

Keep in a dry, cool place.

Advice on protection against fire and explosion

Take precautionary measures against static discharges. Vapours may form explosive mixture with air. Use water spray to cool unopened containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

METHYL METHACRYLATE

Workplace exposure limits:

Respirable dust

| State | LTEL value/ppm | LTEL mg/m ³ | STEL value/ppm | STEL mg/m ³ | Source |
|--------|----------------|------------------------|----------------|------------------------|--|
| UK | 50 | 208 | 100 | 416 | EH40/2005 Workplace exposure limits (2011) |
| Europe | 50 | 100 | - | - | ISSUING DATE 2009/161 DIRECTIVE 2009/161/EU |

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| DNEL | Target Group | Exposure Route | Exposure Frequency | Source |
|------------------------|--------------|----------------|----------------------------|--------------|
| 210 mg/m ³ | Workers | Inhalation | Long term effects Local | Company Data |
| 210 mg/m ³ | Workers | Inhalation | Long term effects systemic | Company Data |
| 1,5 mg/cm ² | Workers | Skin | Long term effects Local | Company Data |
| 13,67 mg/kg | Workers | Skin | Long term effects systemic | Company Data |
| 105 mg/m ³ | Consumers | Inhalation | Long term effects Local | Company Data |
| 74,3 mg/m ³ | Consumers | Inhalation | Long term effects systemic | Company Data |
| 1,5 mg/cm ² | Consumers | Skin | Long term effects Local | Company Data |
| 8,2mg/kg | Consumers | Skin | Long term effects systemic | Company Data |
| 1,5 mg/cm ² | Consumers | Skin | Long term effects Local | Company Data |

| PNEC | Exposure Route | Source |
|------------|----------------|--------------|
| 0,94 mg/l | Freshwater | Company Data |
| 0,094 mg/l | Marine water | Company Data |
| 5,74 mg/kg | Sediment | Company Data |
| 1,47 mg/kg | Soil | Company Data |

1,4-Butandiol dimethacrylate

| DNEL | Target Group | Exposure Route | Exposure Frequency | Source |
|------------------------|--------------|-----------------|----------------------------|--------------|
| 14,5 mg/m ³ | Workers | Inhalation | Long term effects systemic | Company Data |
| 4,2 mg/kg | Workers | Dermal Exposure | Long term effects systemic | Company Data |

1,1'-(p-Tolylimino)dipropan-2-ol

| DNEL | Target Group | Exposure Route | Exposure Frequency | Source |
|---------------------|--------------|----------------|--------------------|--------------|
| 2 mg/m ³ | Workers | Inhalation | Long term effects | Company Data |
| 4,2 mg/kg | Workers | Skin | Long term effects | Company Data |

1,1'-(p-Tolylimino)dipropan-2-ol

| PNEC | Exposure Route | Source |
|-------------|-----------------------|--------------|
| 199,5 mg/l | Waste Water Treatment | Company Data |
| 0,0072 mg/l | Marine Water | Company Data |
| 0,017 mg/l | Freshwater | Company Data |

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8.2. Exposure controls

| | |
|---|---|
| Respiratory protection: | Vapour during processing may be irritating to the respiratory tract and to the eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |
| Remarks: | Recommended Filter type: A1, A2 (in case of higher concentration) Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). |
| Hand protection: | Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. |
| Suitable material: | Nitriles. |
| Unsuitable material: | Woven fabric, Leather gloves. |
| Material thickness | 0,38 mm |
| Break through time: | <25 min. |
| Eye protection: | Tightly fitting safety goggles |
| Skin and body protection: | Wear suitable protective equipment. Long sleeved clothing. |
| General protective and hygiene measures: | Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at the end of workday. Use protective skin cream before handling the product. Avoid contact with the skin and the eyes. |
| Engineering measures: | Ensure adequate ventilation, especially in confined areas. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| State: | Liquid |
| Colour: | Colourless |
| Physical state: | Liquid |
| Odour: | Smell of Methyl methacrylate |
| Melting point [°C] / Freezing Point [°C]: | Not determined |
| Boiling point [°C]: | >100 °C |
| Explosion limits [Vol-%]: | The product itself has not been tested. |
| Lower limit | 1,7 vol. % |
| Upper limit | 12,5 vol % |
| Flash point [°C]: | 10 °C |
| Ignition temperature [°C]: | Not determined |
| PH | Not applicable |
| Remarks | Insoluble |
| Partition coefficient n-octanol / Water (log P O/W): | Not determined |
| Vapour pressure [kPa]: | > 50 hPa |
| Density [g/cm³]: | 1,0 g/cm ³ |
| Temperature: | 20 °C |
| Vapour density: | Not determined |

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9.2. Other information

| | |
|---|--|
| Evaporation rate [kg/(s*m ²)] | Not determined. |
| Explosive properties | In use, may form flammable/explosive vapour-air mixture. |
| Form | Liquid |
| Flow time [s] | 50 sec |
| Temperature [°C] | 20 °C |
| Measuring method | DIN Cup 4 mm |

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended transport or storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is noticeably exceeded, the product may polymerize with heat evolution. Risk of receptacle bursting.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Reacts strongly with peroxides. Reducing agents, Strong bases, Amines, Oxidizing agents

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on the hazard classes within the meaning of Regulation (EU) No. 1272/2008

| Oral toxicity [mg/kg] – Hazardous Ingredients | | | | |
|---|----------------|--------------|-------------------------|--------------|
| methyl methacrylate | | | | |
| Value | Test criterion | Test species | Measuring method | Source |
| >5001 mg/kg | LD50 | Rat | OECD Test Guideline 401 | Company data |

| 1.4-Butandioldimethacrylate | | | | |
|-----------------------------|----------------|--------------|-------------------------|--------------|
| Value | Test criterion | Test species | Measuring method | Source |
| >5001 mg/kg | LD50 | Rat | OECD Test Guideline 401 | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | | | | |
|----------------------------------|----------------|--------------|-------------------------|--------------|
| Value | Test criterion | Test species | Measuring method | Source |
| >5001 mg/kg | LD50 | Rat | OECD Test Guideline 423 | Company data |

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| Dermal toxicity [mg/kg] – Hazardous Ingredients | | | |
|---|----------------|--------------|--------------|
| methyl methacrylate | | | |
| Value | Test criterion | Test species | Source |
| >5001 mg/kg | LD50 | Rabbit | Company data |

| 1.4-Butandioldimethacrylate | | | | |
|-----------------------------|----------------|--------------|---------|--------------|
| Value | Test criterion | Test species | Remarks | Source |
| >3000 mg/kg | LD50 | Rabbit | * 1) | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | | | |
|----------------------------------|----------------|--------------|--------------|
| Value | Test criterion | Test species | Source |
| 2001 mg/kg | LD50 | Rat | Company data |

| LC50 Inhalation 4h for vapours toxicity [mg/l] – Hazardous Ingredients | | | |
|--|----------------|--------------|--------------|
| methyl methacrylate | | | |
| Value | Test criterion | Test species | Source |
| 29,8 mg/l | LD50 | Rat | Company data |

| Irritant effect on skin – Hazardous Ingredients | | |
|---|--------------|--------------|
| methyl methacrylate | | |
| Value | Test species | Source |
| Irritating | Rabbit | Company data |

| 1.4-Butandioldimethacrylate | |
|-----------------------------|--------------|
| Value | Source |
| No skin irritation | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | |
|----------------------------------|--------------|
| Value | Source |
| No skin irritation | Company data |

| Irritant effect on eyes – Hazardous Ingredients | | |
|---|--------------|--------------|
| methyl methacrylate | | |
| Value | Test species | Source |
| Irritant | Rabbit | Company data |

| 1.4-Butandioldimethacrylate | |
|-----------------------------|--------------|
| Value | Source |
| No eye irritation | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | |
|----------------------------------|--------------|
| Value | Source |
| Irritant | Company data |

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| Sensitization – Hazardous Ingredients | | |
|--|---------------------|---------------|
| methyl methacrylate | | |
| Value | Test species | Source |
| Skin Sensitization | Mouse | Company data |

| 1.4-Butandioldimethacrylate | | |
|------------------------------------|---------------------|---------------|
| Value | Test Species | Source |
| Sensitizing | Mouse | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | |
|--|---------------|
| Value | Source |
| No sensitization responses were observed | Company data |

| Mutagenicity – Hazardous Ingredients | |
|---|---------------|
| methyl methacrylate | |
| Value | Source |
| Not mutagenic | Company data |

| 1.4-Butandioldimethacrylate | |
|------------------------------------|---------------|
| Value | Source |
| No known effect | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | |
|---|---------------|
| Value | Source |
| Negative | Company data |

| Carcinogenic – Hazardous Ingredients | | |
|---|---------------------|---------------|
| methyl methacrylate | | |
| Value | Test species | Source |
| Not a carcinogen | Rat, Mouse | Company data |

| 1.4-Butandioldimethacrylate | |
|------------------------------------|---------------|
| Value | Source |
| No known effect | Company data |

| Reproduction toxicity – Hazardous Ingredients | |
|--|---------------|
| methyl methacrylate | |
| Value | Source |
| Not toxic to reproduction | Company data |

| 1.4-Butandioldimethacrylate | |
|------------------------------------|---------------|
| Value | Source |
| No known effect | Company data |

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| Specific target organ toxicity (single exposure) [mg/kg] – Hazardous Ingredients | |
|--|--------------|
| methyl methacrylate | |
| Value | Source |
| Causes respiratory tract irritation | Company data |

| 1.4-Butandioldimethacrylate | |
|-----------------------------|--------------|
| Value | Source |
| No known effect | Company data |

| Specific target organ toxicity (repeated exposure) [mg/kg] – Hazardous Ingredients | |
|--|--------------|
| methyl methacrylate | |
| Value | Source |
| No known effect | Company data |

| 1.4-Butandioldimethacrylate | |
|-----------------------------|--------------|
| Value | Source |
| No known effect | Company data |

11.2 Information about other hazards

Experience in practice

Symptoms of over exposure may be headache, dizziness, tiredness, Nausea and vomiting. Irritating to eyes, respiratory system and skin. Irritating to mucous membranes.

SECTION 12: Ecological information

12.1. Toxicity

| Toxicity to fish [mg/l] | | | | | |
|-------------------------|----------------|-------------------------------------|-------------------------|-----------------------|--------------|
| methyl methacrylate | | | | | |
| Value | Test Criterion | Test Species | Measuring Method | Exposure duration [h] | Source |
| 191 mg/l | LC50 | Oncorhynchus mykiss (rainbow trout) | OECD Test Guideline 203 | 96h | Company data |

| 1.4-Butandioldimethacrylate | | | | |
|-----------------------------|----------------|------------------------------|-----------------------|--------------|
| Value | Test Criterion | Test Species | Exposure duration [h] | Source |
| 191 mg/l | LC50 | Leuciscus idus (Golden orfe) | 48h | Company data |

| 1,1`-(p-Tolylimino)dipropen-2-ol | | | | |
|----------------------------------|----------------|--------------------------------|-----------------------|--------------|
| Value | Test Criterion | Test Species | Exposure duration [h] | Source |
| 17 mg/l | LC50 | Brachydanio rerio (zebra fish) | 96h | Company data |

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| Toxicity to daphnia [mg/l] | | | | | |
|----------------------------|----------------|----------------------------|-----------------------|-------------------------|--------------|
| methyl methacrylate | | | | | |
| Value | Test Criterion | Test Species | Exposure duration [h] | Measuring Method | Source |
| 69 mg/l | EC50 | Daphnia magna (Water flea) | 48h | OECD Test Guideline 202 | Company data |

| 1.4-Butandioldimethacrylate | | | | | |
|-----------------------------|----------------|----------------------------|-----------------------|--------------|--|
| Value | Test Criterion | Test Species | Exposure duration [h] | Source | |
| 7,51 mg/l | EC10 | Daphnia magna (Water flea) | 21 Day(s) | Company data | |

| 1,1`-(p-Tolylimino)dipropan-2-ol | | | | | |
|----------------------------------|----------------|----------------------------|-----------------------|--------------|--|
| Value | Test Criterion | Test Species | Exposure duration [h] | Source | |
| 28,8 mg/l | EC50 | Daphnia magna (Water flea) | 18h | Company data | |

| Toxicity to algae [mg/l] | | | | | |
|--------------------------|----------------|---|-----------------------|-------------------------|--------------|
| methyl methacrylate | | | | | |
| Value | Test Criterion | Test Species | Exposure duration [h] | Measuring Method | Source |
| >110 mg/l | EC50 | Selenastrum capricornutum (green algae) | 72h | OECD Test Guideline 201 | Company data |

| 1.4-Butandioldimethacrylate | | | | | |
|-----------------------------|----------------|-------------------------|-----------------------|--------------|--|
| Value | Test Criterion | Test Species | Exposure duration [h] | Source | |
| 9,79 mg/l | EC50 | Desmodesmus subspicatus | 72h | Company data | |

| 1,1`-(p-Tolylimino)dipropan-2-ol | | | | | |
|----------------------------------|----------------|-------------------------|-----------------------|--------------|--|
| Value | Test Criterion | Test Species | Exposure duration [h] | Source | |
| 245 mg/l | EC50 | Desmodesmus subspicatus | 27h | Company data | |

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| NOEC (fish) [mg/l] | | | |
|---------------------|--------------------------------|-------------------------|--------------|
| methyl methacrylate | | | |
| Value | Test Species | Measuring Method | Source |
| 9,4 mg/l | Brachydanio rerio (zebra fish) | OECD Test Guideline 210 | Company data |

| NOEC (daphnia) [mg/l] | | | |
|-----------------------|----------------------------|-------------------------|--------------|
| methyl methacrylate | | | |
| Value | Test Species | Measuring Method | Source |
| 37 mg/l | Daphnia magna (Water flea) | OECD Test Guideline 202 | Company data |

12.2 Persistence and degradability

| Biodegradability | | |
|------------------------|---|--------------|
| methyl methacrylate | | |
| Value | Method of analysis | Source |
| Readily biodegradable. | OECD 301C/ ISO 9408/ EEC 92/69/V, C.4-F | Company data |

| 1.4-Butandioldimethacrylate | | |
|-----------------------------|------------------------|--------------|
| Value | Remarks | Source |
| Biodegradable. 84 % | Angabe des Herstellers | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | |
|----------------------------------|--------------|
| Value | Source |
| Poorly Biodegradable | Company data |

12.3. Bioaccumulative potential

Bioaccumulation potential

| Bioaccumulation | |
|------------------------|--------------|
| methyl methacrylate | |
| Value | Source |
| Does not bioaccumulate | Company data |

| 1.4-Butandioldimethacrylate | |
|-----------------------------|--------------|
| Value | Source |
| Does not bioaccumulate | Company data |

| 1,1`-(p-Tolylimino)dipropan-2-ol | |
|----------------------------------|--------------|
| Value | Source |
| No data available | Company data |

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12.4. Mobility in soil

| | |
|--------------------------------------|---------------|
| Mobility | |
| methyl methacrylate | |
| Value | Source |
| Terrestrial Compartment Not Relevant | Company data |

12.5. Results of PBT and vPvB assessment

Results of PBT characteristics de-termination

This preparation contains no substance considered to be persistent bioaccumulating nor toxic (PBT).

12.7. Other harmful effects

Further information on ecology

We have no quantitative data concerning the ecological effects of this product.

SECTION 13: Disposal considerations




13.1. Waste treatment methods

Disposal Considerations: According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions:

Waste Code: 08 01 11* waste paint and varnish containing organic solvents or other. dangerous substances.

Uncleaned empty packaging The return of packaging materials is regulated by the interseroh system.

SECTION 14: Transport information

| | Land transport ADR/RID | Marine transport IMDG | Air transport ICAO/IATA |
|--|---|--|---|
| 14.1 UN No. | 1263 | 1263 | 1263 |
| 14.2 Description of the goods | PAINT | PAINT | PAINT |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 |
| 14.4 Packaging group | II | II | II |
| Labels |  |  |  |
| Risk No. | 33 | | |
| Category | 2 | | |
| Factor | 3 | | |
| Classification Code | F1 | | |
| SP 640 | 640D | | |
| Tunnel restriction code | D/E | | |
| EmS | | F-E;_S-E | |
| Stowage category | | B | |
| UN proper shipping name | UN 1263 PAINT | UN 1263 PAINT | UN 1263 PAINT |

14.7 Bulk transport by sea according to IMO instruments

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not relevant

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Additional regulations Additionally, observe any national regulations

Classification in compliance with the Industrial Safety Regulation Highly Flammable

GISCODE RMA10

MAL-Code 4-5

SECTION 16: Other information

Relevant H-phrases

H225: Highly flammable liquid and vapour.

H300: Fatal if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H412: Harmful to aquatic life with long lasting effects.

Wording of the hazard classes

Flam. Liq.: Flammable liquid

STOT SE: Specific target organ toxicity - single exposure.

Skin Irrit.: Skin irritation

Skin Sens.: Skin sensitization

Acute Tox.: Acute toxicity

Eye Irrit.: Serious eye irritation

Aquatic Chronic: Hazardous to the aquatic environment

Classification for mixtures and used evaluation method:

| Classification | Evaluation |
|---------------------|------------|
| Flam. Liq. 2; H225 | Calculated |
| Skin Irrit. 2; H315 | Calculated |
| Skin Sens. 1; H317 | Calculated |
| STOT SE 3; H335 | Calculated |

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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

1.1. Product identifier

| | |
|--------------------------|-------------------------------------|
| Product Name | MMA Resin Peroxide |
| Product Inclusion | MMA Resin Peroxide – catalyst only. |
| Container Size | 80g |

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

| | |
|-----------------------------|--|
| Identified Uses | Hardener for road marking filler (3 components) Mix only the Catalyst Part B Respect the dosage Part B/hardener indicated by the supplier Professional use only |
| Uses advised against | No specific uses advised against are identified. |

1.3. Details of the supplier of the safety data sheet

| | |
|-----------------|---|
| Supplier | Meon Ltd. Railside Northarbour Spur Portsmouth PO6 3TU +44 (0) 23 9220 0606 mail@meonuk.com |
|-----------------|---|

1.4. Emergency Telephone Number

| | |
|----------------------------|----------------------|
| Emergency telephone | +44 (0) 808 118 1922 |
|----------------------------|----------------------|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to regulation EC1272/2008 and amendments

Org. Perox. D Category D – H242
SKIN Sens. 1 – Hazard category 1 – H317
Eye Irrit. 2 – Hazard category 2 – H319
Aquatic Acute. 1 – Hazard category 1 – H400
Aquatic Chronic. 1 – Hazard. Category 1 – H410
Repr. 1B – Hazard Category 1B – H360D

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2.2. Label Elements

Hazard pictograms



Signal word

Danger

H-statement(s)

H242 – Heating may cause a fire
 H317 – May cause an allergic skin reaction
 H319 – Causes serious eye irritation
 H360D May damage the unborn child
 H410 Very toxic to aquatic life with long lasting effects

P-statement(s)

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P220 Keep away from strong acids, bases, heavy metals salts and other reducing substances.
 P234 Keep only in original container.
 P261 Avoid breathing dust/vapours.
 P273 – Avoid release to the environment.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove cc lenses, if present and easy to do. Continue rinsing.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P501 - Dispose of contents/container in accordance with local and national regulation

2.3. Other hazards

The mixture component: dicyclohexyl phthalate CAS: 84-61-7 is on the Candidate List SVHC

SECTION 3: Composition/information on ingredients

SUBSTANCE [] MIXTURE [X]

Dangerous component(s)

| Ingredient | CAS No. EC No. REACH No. | Index | Classification (EC) 1272/2008 | Concentration |
|--------------------|---|--------------|--|---------------|
| Dibenzoyl peroxide | 94-36-0 202-327-6 01-2119511472-50-0001 | 617-008-00-0 | Org. Perox. B – H241 Skin Sens. 1 – H317 Eye Irrit. 2 – H319 Aquatic Acute 1 – H400 (M=10)** Aquatic Chronic 1, H410; M=10 GHS01 GHS02 GHS07 Dgr | 49-52.5% |

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| | | | | |
|---|--|--------------|---|----------|
| Diclohexyl phthalate | 84-61-7 201-545-9 01-2119978223-34-0000 | 607-719-00-4 | Skin Sens. 1, H317 Repr. 1B, H360D Aquatic Chronic 3, H412 GHS08 GHS07 Dgr | 47.5-51% |
| silicon dioxide obtained by chemical transformation | 112926-00-8 7631-86-9 231-545-4 01-2119379499-16-0000 | - | Not classified | <0.5% |

SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

4.1. Description of first aid measures

- In case of inhalation:** Move immediately subject to fresh air and keep him calm.
Place the victim in a position where it can easily breathe.
If breathing is difficult, seek medical attention.
- In case of skin contact:** Wash immediately with non-abrasive soap and plenty of water, at least 15 minutes. If skin irritation persists, consult a doctor.
Wash contaminated clothing before re-using.
- In case of eye contact:** Rinse immediately with plenty of water for at least 15 minutes, holding eyelids open.
If the person uses contact lenses, remove them with caution.
Quickly consult a specialist if irritation persists.
- In case of ingestion:** Do not induce vomiting. Get medical attention immediately.

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

Sensitization of the skin - redness, swelling, irritation of the eyes.
Suspected of damaging fertility or the unborn child

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media** water spray, carbon dioxide, foam, sand.
- Extinguishing media which must not be used for safety reasons** Do not use halons.

5.2. Special hazards arising from the substance or mixture

- Specific hazards during firefighting** Contains substances that may result in explosion caused by heat
The product decomposes in an explosive way from 60°C.
The products of decomposition must be considered as potentially dangerous and precautions must be taken in consequences (mix of benzene, benzoic acid, biphenyl, phenyl benzoate, carbon dioxide).

5.3. Advice for firefighters

- Special protective equipment for firefighting.** Wear full firefighting protective clothing and self-contained breathing apparatus.
Use water spray to keep fire-exposed containers cool.

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Do not allow fire extinguishing water to contaminate surface or groundwater systems.

Further information

Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition, containers and equipment located near the fire should be cooled with water; water used to extinguish fire should not get into the sewer system and waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing, protective gloves, eye protection and face. Do not let to contaminate the peroxide into drains and ground water; avoid hot, contact with combustible materials and flammable substances.

6.2. Environmental precautions

Do not let enter drains, surface and ground water and soil.

6.3. Methods and material for containment and cleaning up

Protect drains. Collect material into sealable plastic containers and transported to the disposal site. Waste should NOT be closed.

Reference to other sections

See section 8 for information on personal protection equipment

See section 13 for disposal information

SECTION 7: Handling and storage

7.1. Precautions on safe handling

Weigh at temperature below than +25°C, do not mix directly with reducing agents, promoters, etc. Do not shake, do not throw, etc. Do not eat, drink or smoke in the production and storage. After work, wash your hands every time. Keep work clothing separately and do not take home. Do not use tools that cause sparks.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from sources of ignition, heat, light, at a temperature below +30°C.

Do not smoke, before and after contact with the peroxide wash your hands thoroughly; Only use of a suitable tool material (polyethylene, polypropylene, stainless steel).

7.3. Specific and uses

No information about other applications than the udder in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Regulation of the Minister of Labor and Social Policy of 12 June 2018 on the highest allowable concentrations and intensities of agents harmful to health in the work environment (Journal of Laws of 2018, item 1286 of 3 July 2018)

Dibenzoyl peroxide

NDS – 5 mg/m³

NDSCH – 10 mg/m³

TWA – 5 mg/m³

DNEL for workers (Chronic exposure by inhalation systemic) 39 mg/m³.

DNEL for workers (dermal chronic, systemic): 13,3 mg / kg body weight / day

DNEL for workers (dermal chronic, local): 34 µg/cm²

Dicyclohexyl phthalate

NDS: not determined

NDSCh: not determined

DNEL for employee (chronic exposure by inhalation, systemic): 35.2 mg/m³

DNEL for workers (dermal chronic, systemic): 0.5 mg/kg/day

DNEL general population (chronic exposure by inhalation, systemic): 0.87 mg/m³

DNEL general population (chronic exposure through the skin, systemic): 0.25 mg/kg/day

DNEL general population (chronic oral, systemic): 0.25 mg/kg/day

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Silicon dioxide obtained by chemical transformation

total dust – NDS - 10 mg/m³

respirable dust- NDS - 2 mg/m³

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Make sure that working area is well ventilated. Explosion proof ventilation is recommended.

8.2.2. Individual protection measure, such as personal protective equipment a

| | |
|-------------------------------|---|
| Eye/face protection | Use safety goggles or face protection from plexiglass. |
| Skin protection | Use appropriate protective antistatic clothing. |
| Hand protection | Use appropriate protective gloves of synthetic rubber like neoprene or butyl-rubber (thickness: 0.5 mm, rupture time > 8h). |
| Respiratory protection | Use short duration filter unit: Filter A |
| Thermal hazards | in normal work condition no thermal hazard |
| Hygiene at the work | General regulations on hygiene. Do not allow them to cross in the workplace environment, regulatory exposure limits. After working Remove contaminated clothing - not to take home. Do not eat, drink or smoke in the production and storage facilities. After work, wash your hands each time. |

8.2.3. Environmental exposure controls

Protect against the introduction into the municipal water and sewage system and watercourses.

Dibenzoyl peroxide:

PNEC freshwater: 0.02 µg / l

PNEC sea water: 0.002 µg / l

PNEC sediment-freshwater: 0.013 mg / kg

PNEC sediment-sea water: 0.001 mg / kg

PNEC soil: 0.002 mg / kg soil

PNEC STP: 0.35 mg / l

Dicyclohexyl phthalate:

PNEC: freshwater water: 0.00362 mg/l

PNEC sea water: 0.000362 mg/l

PNEC periodic release: 0.0362 mg/l

PNEC sediment- sea water: 1.06 mg/kg

PNEC soil: 0.21 mg/kg

PNEC STP: 10 mg/

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------------------------|--------------------------------------|
| Appearance- Colour - Odour | Solid. Powdery – White - faint odour |
| pH | Ca. 7 |
| Boiling Point [°C] | Not determined. |
| Flash point | Not determined. |
| Evaporate Rate | Not determined. |
| Solubility in water | Insoluble |
| Flammable limits | Not applicable. |

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| | |
|--|---|
| Vapour pressure | Not applicable. |
| Relative vapour density (related to air) | 630kg/ m3 |
| Gravity | 620 kg/m3 - 20°C |
| Partition coefficient (n-octanol/water) | Not determined. |
| Auto ignition temperature | Not determined. |
| Decomposition temperature | +55°C |
| Viscosity | Not applicable. |
| Explosive properties | One component (benzoyl peroxide is explosive) |
| Oxidising properties | Organic peroxide |

9.2. Other information

Active oxygen content: 3.24 – 3.47%

SECTION 10: Stability and reactivity

10.1. Reactivity

sensitive to exothermic decomposition, decomposition is initiated by heat, contact with impurities (e.g., acids, heavy metal compounds, amines), friction or impact.

10.2. Chemical stability

under heat rapidly disintegrate.

10.3. Possibility of hazardous reactions

SADT (self accelerating decomposition temperature) possible at temperature above approximately +55°C, vapour may form explosive mixtures with air.

10.4. Conditions to avoid

Avoid high temperatures, light, pollution, rust.

10.5. Incompatible materials

Avoid contact with rust, copper, heavy metals, strong oxidizing agents, strong acids and strong bases.

10.6. Hazardous decomposition products

hydrocarbons, derivatives of benzoic acid, irritating, corrosive, flammable gases may be formed in a fire or decomposition.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

The mixture was not tested, application of the conventional method from different substances which compose it.

Acute Toxicity

| | |
|---|---|
| Chemical name: | DIBENZOYL PEROXIDE |
| | Oral: no adverse effect observed |
| | DNEL: 2000 mg/kg bw; LD50(mouse): > 2000 mg/kg |
| | Dermal: no study available |
| Skin corrosion/irritation: | No adverse effect observed – not irritant |
| Serious eye damage/irritation: | Adverse effect observed – irritant |
| Respiratory or skin sensitisation: | Adverse effect observed – cause sensitisation by skin contact |
| Germ cell mutagenicity: | In vitro/in vivo - no adverse effect observed (negative result) |
| Carcinogenicity: | Oral, skin -no relevant information available |
| | Inhalation – no data available |
| Reproductive toxicity: | No data available |
| STOT – single exposure | Not classified based on available information |
| STOT – repeated exposure | Not classified based on available information |

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Repeated dose toxicity Not classified for repeated dose toxicity
oral: adverse effect observed.
NOAEL: 200 mg/kg bw/day (rat, chronic)
skin (systemic): no adverse effect observed.
NOAEL: 833 mg/kg bw/day (rat, chronic)
skin (local): adverse effect observed.
NOAEL: 0.17 mg/cm² (mouse, chronic)
Inhalation (systemic, local): no data available

Aspiration hazard Not classified based on available information.

Chemical name: DICYCLOHEXYL PHTHALATE
Acute toxicity: LD50 (rat):> 2000 mg / kg
Skin corrosion/irritation: Not present – not classified
Serious eye damage/irritation: Eyes – slight irritation – not classified
Respiratory or skin sensitisation: Possible sensitization by skin contact
Germ cell mutagenicity: Does not occur
Carcinogenicity: Does not occur
Reproductive toxicity: may damage the unborn child.
rat 240 ppm NOAEL
STOT – single exposure No data available
STOT – repeated exposure No data available
Repeated dose toxicity NOAEL rat, 50 mg/kg bw./day
Aspiration hazard No data available

Acute toxicity: SILICON DIOXIDE OBTAINED BY CHEMICAL TRANSFORMATION
oral - LD50 (rat):> 10000 mg / kg
inhalation - LCO (rat, 4h): 0.139 mg / l
skin - LC50(rabbit): > 5000 mg / kg

Skin corrosion/irritation: Not present – not classified
Serious eye damage/irritation: Not present – not classified
Respiratory or skin sensitisation: Not present – not classified
Germ cell mutagenicity: Does not occur
Carcinogenicity: Does not occur
Reproductive toxicity: Does not occur
STOT – single exposure No data available
STOT – repeated exposure No data available
Repeated dose toxicity No data available
Aspiration hazard No data available

SECTION 12: Ecological information

The mixture was not tested, application of the conventional method from different substances which compose it.

12.1. Toxicity

| Substance(s) | | | EC50 | CL50 | LC50 | Species |
|------------------------------------|------|-------------|-------------------|------|------------|---------------------|
| Dibenzoyl peroxide - factor M = 10 | NOEC | 0.110 mg/l | 0.0765 mg/l | | 0.110 mg/l | Daphnia magna (48h) |
| | NOEC | 0.0602 mg/l | 0.0602 mg/l | | | Fish (96h) |
| | NOEC | 0.0711 mg/l | 0.0711 mg/l | | | Algae (72h) |
| | NOEC | 35 mg/l | 35 mg/l | | | Bacteria (0.5h) |
| Dicyclohexyl Phthalate | | | 2mg/l acute toxic | | | Daphnia magna (48h) |

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| | | | | | | |
|--|------|-----------------------------|--|--|----------|-------------------------|
| | NOEC | 0.679 mg/l chronic toxic | | | | Daphnia magna (21 days) |
| | | | | | >2 mg/l | Fish (96h) |
| | | | | | 0.06mg/l | Algae (72h) |

12.2. Persistence and degradability

DIBENZOYL PEROXIDE:

It is hydrolytically unstable under basic conditions, acidic and neutral. Benzoic acid is the major compound produced by the decomposition during hydrolysis.

DICYCLOHEXYL PHTHALATE:

readily biodegradable - 91% - 28 days

12.3. Bioaccumulative potential

DIBENZOYL PEROXIDE:

Log Kow = 3.2 indicates a low probability of bioaccumulation; readily biodegradable

DICYCLOHEXYL PHTHALATE:

Potential low

Ig Pow 4.82 (25oC)

BCF: 85 – 90

12.4. Mobility in soil

DIBENZOYL PEROXIDE:

Koc = 6310 at temp. 20oC

DICYCLOHEXYL PHTHALATE:

substance is insoluble.

log Koc=3.46 w temp. 20oC

12.5. Results of PBT and vPvB assessment

This product does not contain any BPT or vPvB substance.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations


13.1. Waste treatment methods

Spilled products collect for recycling. The product expired - for recycling. Waste code 16 03 05* "organic wastes containing dangerous substances". The product may be disposed of by incineration. Burning should be done in a location away from buildings and industrial facilities in a specialized furnace to burn waste chemicals. Packaging of the product be disposed of as hazardous waste code 15 01 10* "Packaging containing residues of or contaminated by dangerous ..."

SECTION 14: Transport information

| | ADR / RID | IMDG | IATA |
|--|---|------|------|
| 14.1 N° ONU | | 3106 | |
| 14.2 UN proper shipping name | PEROXYDE ORGANIQUE de type D, solide (Dibenzoyl peroxide) | | |
| 14.3 Transport hazard class label | | 5.2 | |

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| | | | |
|---|--|--------------------------|----------------|
| |  | | |
| 14.4 Packing Group | Non-applicable | Non-applicable | Non-applicable |
| 14.5 Dangerous for Environment | Yes | Yes | Yes |
| 14.6 Special precautions for users | Tunnel restriction : D Limited quantities: 500g | Limited quantities :500g | |
| 14.7 Transport in bulk (annexe II MARPOL 73/78 and IBC code) | Not authorized for carriage in bulk | | |

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation).

European Agreement Concerning the International Carriage of Dangerous Goods by Road, 2019

Candidate List SVHC, updated on 16/01/2020:

There is the component of the mixture on the list - Dicyclohexyl phthalate CAS: 84-61-7

15.2 Chemical safety assessment

Data not available.

SECTION 16: Other information

Relevant H & R phrases from section 3

H241 Heating may cause a fire or explosion

H317 May cause an allergic skin reaction

H319 Irritating to eyes

H360D May damage the unborn child

H400 Very toxic to aquatic organisms

H410 Very toxic to aquatic life with long lasting effects

H412 Harmful to aquatic life with long lasting effects

Abbreviations and acronyms

Explanation of abbreviations / acronyms

BCF – Bio Concentration Factor

DNEL - derived dose level (concentration) at which no observed adverse effect level [mg/kg, mg/l]

PNEC - predicted concentrations do not cause changes in the environment [mg/kg, mg/l]

NOEC - the highest dose, or concentration of a toxic substance at which no adverse effect is observed in its operation.

NOAEL - no observable adverse effect level

NDS Exposure Limit - the average weighted concentration, the impact on the employee, during an 8-hour daily and average weekly working time laid down in the Labour Code, the period of its activity should not cause negative changes in its state of health and in the health of future generations.

NDSch - Maximum Acceptable Concentrations Momentarily - the average concentration that should not cause adverse changes in the health of the worker, whether in the workplace no longer than 15 minutes and not more than two times during the work shift, with an interval of not less than one hour.

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Training: Those involved in trading a hazardous substance should be trained in the handling, safety and hygiene. Drivers should be trained and obtain proper certification in accordance with the requirements of ADR.

Disclaimer

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