

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]



SAFETY DATA SHEET

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	UltraCrack L270 MMA
Product Inclusion	Part.1 of this document covers UltraCrack L270 MMA base resin only.
Container Size	9kg, 18kg

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

Identified Uses	Road marking material.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier	MHL Group, (Trading name of 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) 800 118 1922
----------------------------	----------------------

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flam. Liq 2;	H225
Skin Irrit. 2;	H315
Skin Sens.;	H317

Classification (67/548/EEC, 1999/45/EC)

Flammable:	R10
Skin Sens.:	R43

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label Elements



UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

GHS02

GHS07

Signal word	Danger
Hazardous component(s) to be indicated on label	2-ethylhexyl acrylate, methyl methacrylate, Fatty acids, C18-unsatd., dimers reaction products with N, N-Dimethyl-1, 3-propanediaminund 1, 3-Propanediamin
H-statement(s)	H225: Highly flammable liquid and vapour. H315: Causes skin irritation. H317: May cause an allergic skin reaction.
P-statement(s)	P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P362+P364: Take off contaminated clothing and wash if before reuse.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Ingredient		Classification (EC) 1272/2008	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	5.0 – 10.0% by weight
2-ethylhexyl acrylate	CAS No.: 103-11-7 EC-No.: 203-080-7 Index-No.: 607-107-00-7 REACH No.: 01-2119453158-37-XXXX	Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335 GHS07 Wng	5.0 – 10.0% by weight
2,2'-[(4-methylphenyl)imino]	CAS No.: 3077-12-1 EC-No.: 221-359-1 REACH No.: 01-2120791684-40-XXXX	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 3; H412	0.1 - 1.0 % by weight
Fatty acids, C18-unsatd., dimers reaction products with N,N-dimethyl-1,3-propanedi-amine and 1,3-propanediamine	CAS No.: 162627-17-0 EC-No.: 605-296-0 REACH No.: 01-2119970640-38-XXXX	Skin Sens. 1; H317	0.1 – 1.0% by weight

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	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.
-----------------------	--

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

If inhaled	Move to fresh air. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
In case of 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.
In case of 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 induce vomiting. Call a physician immediately.

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 Carbon dioxide (CO₂), 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 itself, its combustion products, or released gases. Violent polymerization may be caused by: Extremes of temperature and direct sunlight.

Fire will produce dense black smoke containing hazardous combustion products (see section 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.

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

For disposal considerations see section 13.

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

6.5. Additional information

Treat recovered material as described in the section 13.

SECTION 7: Handling and storage

7.1. Precautions on safe handling

Advise on safe handling

Processing may lead to evolution of flammable volatiles. In case of insufficient ventilation, wear suitable respiratory equipment. Keep product and empty container away from heat and sources of ignition. 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.

Advise 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.

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.

TRGS 510

3

Recommended storage temperature

Keep in a dry, cool place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

METHYL METHACRYLATE

Great Britain				
Long-term exposure value/ppm	Long-term exposure value/mg/m ³	Short term exposure value/ppm	Short-term exposure value/mg/m ³	Source
50	208	100	416	EH40/2005 Workplace exposure limit (2011)

Europe			
Long-term exposure value/ppm	Short-term exposure value/ppm	Issuing date	Source
50	100	2009/161	DIRECTIVE 2009/161/EU

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

DNEL

Value	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	Dermal	Long term effects local	Company data
13,67 mg/kg	Workers	Dermal	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	Dermal	Long term effects local	Company data
8,2 mg/kg	Consumers	Dermal	Long term effects systemic	Company data
1,5 mg/cm ²	Consumers	Dermal	Short term effects local	Company data

PNEC

Value	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

2-ETHYLHEXYL ACRYLATE

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
37,5 mg/m ³	Workers	Inhalation	Long term effects local	Company data
0,242 mg/cm ²	Workers	Dermal	Long term effects local	Company data
0,242 mg/cm ²	Workers	Dermal	Short term effects local	Company data
4,5 mg/m ³	Consumers	Inhale	Long term effects local	Company data

PNEC

Value	Exposure route	Source
0,002752 mg/l	Fresh water	Company data
0,000272 mg/l	Seawater	Company data
2,3 mg/l	Wastewater treatment plan	Company data
0,126 mg/kg	Sediment Water	Company data
0,126 mg/kg	Sediment Seawater	Company data
1,0 mg/kg	Soil	Company data
0,0023 mg/kg	Intermittent releases	Company data

2,2-[(4-METHYLPHENYL)IMINO]BISETHANOL

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
0,47 mg/kg	Workers	Dermal	Long term effects systemic	Company data

PNEC

Value	Exposure route	Source
0,003 mg/l	Seawater	Company data
0,121 mg/kg	Freshwater sediment	Company data
0,026 mg/l	Freshwater	Company data
0,012 mg/kg	Marine sediment	Company data
10 mg/l	Wastewater treatment	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

0,009 mg/kg	Soil	Company data
-------------	------	--------------

8.2. Exposure controls

Respiratory Protection

In interiors and during exceeding of the air limit values carrying of protective masks is absolutely necessary.

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
 Material thickness: 0,38mm
 Break through time: <25 min

Eye Protection

Tightly fitting safety goggles.

Skin and body Protection

Wear suitable protective equipment. Long sleeved clothing.

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

Physical state	Liquid
Form	Liquid
Odour	Smell of Methylmethacrylate
pH	Not applicable
Remarks	Non-aqueous
Melting point [°C] / Freezing point	Not determined
Boiling Point [°C]	>100 °C
Flash point [°C]	21.5 °C
Evaporation Rate [kg/(s* m²)]	Not determined
Explosion limits [Vol-%]	The product itself has not been tested.
Lower limit	methyl methacrylate
Upper limit	1,7 vol. % 12,5 vol. %

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

Lower limit	2-ethylhexyl acrylate
Upper limit	0,9 vol. % 6,4 vol. %
Vapour pressure [kPa]	<500 hPa
Temperature [°C]	50 [°C]
Vapour density	Not determined
Density [g/cm ³]	Appr. 1,90 g/cm ³
Water Solubility	Insoluble
Partitioncoefficient n-octanol /water (log P O/W)	Not determined
Viscosity, dynamic [kg/(m*s)]	12.000 mPas*s
Temperature	20 °C
Measuring Method	Haake-Viscotester
Explosive properties	In use, may form flammable/explosive vapour-air mixture.
Oxidising properties	Not relevant
9.2. Other information	
Ignition temperature	280 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

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 violently with peroxides. Reducing agents, Strong bases, Amines, Oxidizing agents

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients

Oral Toxicity [mg/kg]

METHYL METHACRYLATE

Value	Test criterion	Test species	Measuring method	Source
>5001	LD50	Rat	OWCD Test Guideline 401	Company data

2-ETHYLHEXYL ACRYLATE

Value	Test criterion	Test species	Source
4435 mg/kg	LD50	Rat	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Test criterion	Test species	Source
-------	----------------	--------------	--------

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

959 mg/kg	LD50	Rat	Company data
-----------	------	-----	--------------

**FATTY ACIDS, C18-UNSTAD., DIMERS REACTION PRODUCTS WITH
N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE**

Value	Test criterion	Test species	Measuring method	Source
>10000 mg/kg	LD50	Rat	OECD Test Guideline 401	Company data

Dermal Toxicity [mg/kg]

METHYL METHACRYLATE

Value	Test criterion	Test species	Source
>5001 mg/kg	LD50	Rabbit	Company data

2-ETHYLHEXYL ACRYLATE

Value	Test criterion	Test species	Source
7522 mg/kg	LD50	Rabbit	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Test species	Measuring method	Source
>2001 mg/kg	Rat	OECD Test Guideline 402	Company data

Inhalative toxicity [mg/l]

2-ETHYLHEXYL ACRYLATE

Value	Test species	Source
1,19 mg/l	Rat	Company data

LC50 Inhalation 4h for vapours [mg/l]

METHYL METHACRYLATE

Value	Test criterion	Test species	Source
29,8 mg/l	LC50	Rat	Company data

Irritant effect on skin

METHYL METHACRYLATE

Value	Test species	Source
Irritation	Rabbit	Company data

2-ETHYLHEXYL ACRYLATE

Value	Test species	Exposure duration [h]	Source
Skin Irritation	Rabbit	4h	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Test species	Source
No skin irritation	Rabbit	Company data

**FATTY ACIDS, C18-UNSTAD., DIMERS REACTION PRODUCTS WITH
N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE**

Value	Measuring method	Test species	Source
No skin Irritation	OECD Test Guideline 404	Rabbit	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

Irritant effect on eyes

METHYL METHACRYLATE

Value	Test species	Source
Irritant	Rabbit	Company data

2-ETHYLHEXYL ACRYLATE

Value	Measuring method	Test species	Source
Slightly irritating	OECD Test Guideline 405	Rabbit	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BISETHANOL

Value	Source
Risk of serious damage to eyes	Company data

**FATTY ACIDS, C18-UNSAT., DIMERS REACTION PRODUCTS WITH
N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE**

Value	Measuring method	Test species	Source
No eye irritation	OECD Test Guideline 405	Rabbit	Company data

Sensitisation

METHYL METHACRYLATE

Value	Test species	Source
Skin sensitisation	Mouse	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
Skin sensitisation	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BISETHANOL

Value	Source
No known effect.	Company data

**FATTY ACIDS, C18-UNSAT., DIMERS REACTION PRODUCTS WITH
N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE**

Value	Measuring method	Source
Skin sensitizer	OECD 429	Company data

Carcinogenic effects

METHYL METHACRYLATE

Value	Test species	Source
Not a carcinogen	Rat, Mouse	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
No known effect	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

Mutagenicity

METHYL METHACRYLATE

Value	Source
Not mutagenic	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
No known effect	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Measuring method	Test species	Remarks	Source
Negative	Ames test	Bacteria	In vitro methods	Company data

**FATTY ACIDS, C18-UNSTAD., DIMERS REACTION PRODUCTS WITH
N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE**

Value	Measuring method	Source
Negative	Ames test OECD 471	Company data

Reproduction toxicity

METHYL METHACRYLATE

Value	Source
Not toxic to reproduction	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
No known effect	Company data

Specific target organ toxicity (single exposure) [mg/kg]

METHYL METHACRYLATE

Value	Source
Causes respiratory tract irritation	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
Causes respiratory tract irritation	Company data

Specific target organ toxicity (repeated exposure) [mg/kg]

METHYL METHACRYLATE

Value	Source
No known effect	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
No known effect	Company data

11.2 Additional information

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irritating to eyes, respiratory system and skin. Irritating to mucous membranes.

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to Fish

Hazardous ingredients

METHYL METHACRYLATE

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
191	LC50	Oncorhynchus mykiss (rainbow trout)	96H	OECD Test Guideline 203	Company data

2-ETHYLHEXYL ACRYLATE

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
1,81	LC50	Oncorhynchus mykiss (rainbow trout)	96H	OECD Test Guideline 203	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
101	LC50	Brachydanio rerio (zebra fish)	96H	OECD Test Guideline 203	Company data

FATTY ACIDS, C18-UNSTAD., DIMERS REACTION PRODUCTS WITH N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
>150	LC50	Leuciscus idus (Golden orfe)		DIN 38412	Company data

Toxicity to daphnia [mg/l]

METHYL METHACRYLATE

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
69	EC50	Daphnia magna (Water flea)	48H	OECD Test Guideline 202	Company data

2-ETHYLHEXYL ACRYLATE

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
1,3	EC50	Daphnia magna (Water flea)	48H	OECD Test Guideline 202	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
48	EC50	Daphnia magna (Water flea)	48H	OECD Test Guideline 202	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

**FATTY ACIDS, C18-UNSTAD., DIMERS REACTION PRODUCTS WITH
N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE**

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
>101	EC50	Daphnia magna (Water flea)	48H	OECD Test Guideline 202	Company data

Toxicity to algae [mg/l]

METHYL METHACRYLATE

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
110	EC50	Selenastrum capricornutum (green algae)	72H	OECD Test Guideline 201	Company data

2-ETHYLHEXYL ACRYLATE

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
1,71	ErC50	Desmodesmus subspicatus	72H	OECD Test Guideline 201	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
>101	ErC50	Pseudokirchneriella subcapitata	72H	OECD Test Guideline 201	Company data

**FATTY ACIDS, C18-UNSTAD., DIMERS REACTION PRODUCTS WITH
N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE**

Value	Test criterion	Test species	Exposure duration	Measuring method	Source
>101	ErC50	Pseudokirchneriella subcapitata	72H	OECD Test Guideline 201	Company data

NOEC (Fish) [mg/l]

METHYL METHACRYLATE

Value	Test species	Measuring method	Source
9,4	Brachydanio rerio (zebra fish)	OECD Test Guideline 210	Company data

NOEC (Daphnia) [mg/l]

METHYL METHACRYLATE

Value	Test species	Measuring method	Source
37	Daphnia magna (Water flea)	OECD Test Guideline 202	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

NOEC (Algae) [mg/l]

2-ETHYLHEXYL ACRYLATE

Value	Test species	Measuring method	Source
0,45	Desmodesmus subspicatus	OECD Test Guideline 201	Company data

12.2 Persistence and degradability

Biodegradability

METHYL METHACRYLATE

Value	Measuring method	Source
Readily biodegradable.	OECD 301C/ ISO 9408/ EEC 92/69/V, C.4-F	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
Readily biodegradable.	Company data

2,2'-[(4-METHYLPHENYL)IMINO]BIETHANOL

Value	Source
Not readily biodegradable	Company data

FATTY ACIDS, C18-UNSAT., DIMERS REACTION PRODUCTS WITH N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE

Value	Measuring method	Source
Not readily biodegradable	OECD 301	Company data

12.3. Biocumulative potential

Bioaccumulation

METHYL METHACRYLATE

Value	Source
Does not bioaccumulate	Company data

2-ETHYLHEXYL ACRYLATE

Value	Source
Bioaccumulation slight, log Pow 4,64	Company data

12.4 Mobility in soil

METHYL METHACRYLATE

Mobility	Source
Terrestrial Compartment Not relevant	Company data

12.5. Results of PBT and vPvB assessment.

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

12.6 Other adverse effects

No data available.




UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

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 04 11 * waste paint and varnish containing organic solvents or other dangerous materials.
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
14.3 Transport hazard class(es)	3	3	3
14.4 Packaging group	III	III	III
14.2 Description of the goods	PAINT	PAINT	PAINT
14.2 UN proper shipping name	PAINT	PAINT	PAINT
Remarks	(including paint, lacquer, Enamel, stain, shellac, Varnish , polish, liquid Filler and liquid Lacquer base)	(including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base)	(including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)
Labels			
Risk No.	30		
Category	3		
Factor	1		
Classification Code	F1		
SP 640	640E		
Tunnel restriction code	D/E		
EmS		F-E; S-E	
Stowage category		A	

14.7. Transport in bulk according to Annex II of MARPOL3/78 and the IBC Code

Not relevant

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

SECTION 15: Regulatory information

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

Additionally, observe any national regulations.

Classification in compliance with the industrial Safety Regulations

Flammable.

GISCODE RMA10
MAL-Code 3-5

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Relevant H-phrases

H225: Highly flammable liquid and vapour.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage
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
Aquatic Chronic: Hazardous to the aquatic environment
Acute Tox.: Acute toxicity
Eye Dam.: Serious eye damage

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification	Evaluation
Flam. Liq. 2; H225	Calculated
Skin Irrit. 2; H315	Calculated
Skin Sens. 1; H317	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.

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]



SAFETY DATA SHEET – Part.2

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 UltraCrack L270 MMA
Product Inclusion Part.2 of this document covers MMA Resin Peroxide Only.
Container Size Variable

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

Identified Uses Hardener
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 EC1272/2008 and amendments

Organic peroxides, Type D H242: Heating may cause a fire.
Eye irritation, Category 2 H319: Causes serious eye irritation.
Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.
Aquatic Acute 1; H400 Aquatic Chronic 1; H410

2.2. Label Elements

Hazard pictograms



UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

Signal word	Danger
Hazardous component(s) for labelling	Contains Dibenzoyl peroxide – Dicyclohexyl phtalate
H-statement(s)	H242 Heating may cause a fire. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H410 Very toxic to aquatic life with long lasting effects.
P-statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234: Keep only in original packaging. P235 Keep cool. P261 Avoid breathing dust. P273 Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P281 Use personal protective equipment as required. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P337+P313: If eye irritation persists: Get medical advice /attention. P391: Collect spillage P403: Store in a well-ventilated place. P420: Store separately.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient	N°CAS N° EC N° Enregistrement REACH	Classification (EC) 1272/2008	Concentration
Ethylene dibenzoate	94-49-5 202-338-6 01-2120759933-41-XXXX	Aquatic Chronic 2; H411	45.0 – 50.0 % By weight
Dibenzoyl peroxide	94-36-0 202-327-6 2119511472-50	Org. Perox. B – H241 Skin Sens. 1 – H317 Eye Irrit. 2 – H319 GHS01 GHS02 GHS07 Dgr	45.0 – 50.0 % By weight

UltraCrack L270 MMA

[Part.1 - Base.A | Part.2 – Catalyst]

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	If symptoms persist, call a doctor.
In case of inhalation:	Remove to fresh air. Call a doctor immediately.
In case of skin contact:	Wash off immediately with soap and plenty of water.
In case of eye contact:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
In case of ingestion:	Rinse mouth. Do NOT induce vomiting. Call a doctor immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO ₂), Dry powder, Dry sand, Water spray, Foam.
Extinguishing media which must not be used for safety reasons	Halons

5.2. Special hazards arising from the substance or mixture

Carbon dioxide (CO₂), Carbon monoxide, Benzoic acid, Benzene.

5.3. Advice for firefighters

Special protective equipment for firefighting.	In the event of fire, wear self-contained breathing apparatus.
Additional information on firefighting.	Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe dust. Avoid contact with skin and eyes. Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

6.5. Other information

Risk of ignition.

SECTION 7: Handling and storage

7.1. Precautions on safe handling

Wear personal protective equipment. Do not breathe dust.
Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Organic peroxides Type: OP II

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

Store in original container. Keep container tightly closed in a dry and well-ventilated place.

TRGS 510

5.2

Recommended storage temperature:

Maximum 25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethylene dibenzote

DNEL	Target group	Exposure route	Exposure frequency	Source
10,6 mg/m ³	Workers	Inhalation	Long term effects systemic	Company data
3 mg/kg	Workers	Skin	Long term effects systemic	Company data

PNEC	Exposure route	Source
0,0073 mg/l	Freshwater	Company data
0,00073 mg/l	Seawater	Company data
2,23 mg/kg	Freshwater sediment	Company data
0,223 mg/kg	Marine sediment	Company data
128 mg/l	Wastewater pre-treatment	Company data
0.44 mg/kg	Soil	Company data

dibenzoyl peroxide

Great Britain	
Long-term exposure value mg/m ³	Source
5	EH40/2005 Workplace exposure limits (2011)

DNEL	Target group	Exposure route	Exposure frequency	Source
11,75 mg/m ³	Workers	Inhalation	Long term effects	Company data
6,6 mg/kg	Workers	Dermal exposure	Long term effects	Company data
2,9 mg/m ³	Workers	Inhalation	Long term effects	Company data
3,3 mg/kg	Consumers	Dermal exposure	Long term effects	Company data
1,65 mg/kg	Consumers	Oral	Long term effects	Company data

PNEC	Exposure route	Source
0,000602 mg/l	Freshwater	Company data
0,338 mg/kg	Freshwater sediment	Company data
0,0000602 mg/l	Marine water	Company data
0,0338	Marine sediment	Company data
0,35 mg/l	Wastewater pre-treatment	Company data
6,67 mg/l	Oral	Company data

8.2. Exposure controls

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

Respiratory protection	Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Remarks	Recommended Filter type: P 1
Hand protection	Butyl-rubber Nitriles
Eye Protection	Tightly sealed goggles.
Engineering measures	Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Solid
Colour	White
Odour	Characteristic
Odour Threshold	Not determined.
pH	Not applicable.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability	Heating may cause fire.
Explosion limits	Not applicable.
Vapour pressure	Not applicable.
Relative vapour density	Not applicable.
Density	1,23 g/cm ³
Water solubility	Not determined.
Partition coefficient: noctanol/water (log P O/W)	Not determined.
Auto in flammability	Not auto-flammable.
Decomposition temperature	55 °C
Viscosity, dynamic [kg/(m s)]	Not applicable.
Risk of explosion	Risk of dust explosion.

9.2. Other information

Ignition temperature	55 °C
Bulk density	650 kg/m ³

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition	Self-Accelerating decomposition temperature (SADT) 55 °C
------------------------------	--

10.4. Conditions to avoid

Avoid shock and friction. Temperatures above 25°C can influence the product characteristics.

10.5. Incompatible materials

Materials to avoid	Rust, Iron, Copper, Acids, Reducing agents.
---------------------------	---

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

10.6. Hazardous decomposition products

Benzoic acid, Benzene

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Oral Toxicity [mg/kg]

Ethylene dibenzoate

Value	Test criterion	Test species	Measuring method	Source
>2001 mg/kg	LD50	Rat	OECD Test Guideline 416	Company data

Dibenzoyl peroxide

Value	Test criterion	Test species	Source
>5000 mg/kg	LD50	Rat	Company data

Inhalative toxicity [mg/l]

Dibenzoyl peroxide

Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
24,3 mg/l	LD50	Rat	OECD Test Guideline 403	4 Hours	Company data

LC50 Inhalation 4h for dusts and sprays [mg/l]

Dibenzoyl peroxide

Value	Test criterion	Test species	Source
24,3 mg/l	LC0	Rat	Company data

Irritant effect on skin

Ethylene dibenzoate

Value	Test species	Measuring method	Exposure duration [h]	Source
No skin irritation	Rabbit	OECD Test Guideline 404	4 hours	Company data

Dibenzoyl peroxide

Value	Test species	Measuring method	Source
No skin irritation	Rabbit	OECD Test Guideline 404	Company data

Irritant effect on eyes

Ethylene dibenzoate

Value	Test species	Measuring method	Exposure duration [h]	Source
No eye irritation	Rabbit	OECD Test Guideline 405	1 hour	Company data

Dibenzoyl peroxide

Value	Test species	Measuring method	Source
Eye irritation, reversibel innerhalb 21 Tage	Rabbit	OECD Test Guideline 405	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

Sensitisation

Ethylene dibenzoate

Value	Test species	Measuring method	Remarks	Source
No known effect	Mouse	OECD 429	Skin sensitisation	Company data

Dibenzoyl peroxide

Value	Measuring method	Test species	Source
Skin sensitisation	OECD TG 429	Mouse	Company data

Carcinogenic effects

Ethylene dibenzoate

Value	Source
No known effect	Company data

Dibenzoyl peroxide

Value	Source
Did not show carcinogenic effects in animal experiments.	Company data

Mutagenicity

Ethylene dibenzoate

Value	Source
No known effect	Company data

Dibenzoyl peroxide

Value	Source
Did not show mutagenic effects in animal experiments.	Company data

Reproduction toxicity

Ethylene dibenzoate

Value	Source
No known effect	Company data

Dibenzoyl peroxide

Value	Source
No toxicity to reproduction	Company data

Specific target organ toxicity (single exposure) [mg/kg]

Dibenzoyl peroxide

Value	Source
No data available	Company data

Specific target organ toxicity (repeated exposure) [mg/kg]

Dibenzoyl peroxide

Value	Source
Animal testing did not show any hazardous effects	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish [mg/l]

Ethylene dibenzoate

Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
(>0,434) mg/l	LC50	Brachydanio rerio (zebra fish)	OECD Test Guideline 203	96 h	Company data

Dibenzoyl peroxide

Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
0,0602 mg/l	LC50	Oncorhynchus mykiss (rainbow trout)	OECD Test Guideline 203	96 h	Company data

Toxicity to daphnia [mg/l]

Ethylene dibenzoate

Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
1,4 mg/l	EC50	Daphnia magna (Water flea)	OECD TG 211	21 Days	Company data

Dibenzoyl peroxide

Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
0,110 mg/l	EC50	Daphnia magna (Water flea)	OECD Test Guideline 202	48 h	Company data

Toxicity to algae [mg/l]

Ethylene dibenzoate

Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
(>0,87) mg/l	ErC50	Pseudokirchneriella subcapitata	OECD Test Guideline 201	72 h	Company data

Dibenzoyl peroxide

Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
0,0711 mg/l	EC50	Pseudokirchneriella subcapitata	OECD Test Guideline 201	72 h	Company data

NOEC (fish) [mg/l]

Ethylene dibenzoate

Value	Test species	Measuring method	Source
0,073 mg/l	Brachydanio rerio (zebra fish)	OECD Test Guideline 201	Company data

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

NOEC (daphnia) [mg/l]

Ethylene dibenzoate

Value	Test species	Measuring method	Source
0,045 mg/l	Daphnia magna (Water flea)	OECD TG 211	Company data

NOEC (algae) [mg/l]

Ethylene dibenzoate

Value	Test species	Measuring method	Source
0,045 mg/l	Pseudokirchneriella subcapitata	OECD Test Guideline 201	Company data

12.2 Persistence and degradability

Biodegradability

Ethylene dibenzoate

Value	Duration	Measuring method	Method of analysis	Source
Readily biodegradable. 81 %	28 Day(s)	Closed bottle test	OECD 301D/ EEC 92/69/V, C.4-E	Company data

Dibenzoyl peroxide

Value	Duration	Measuring method	Remarks	Source
Biodegradable. 68 %	28 Day(s)	OECD 301D/ EEC 92/69/V, C.4-E	inherently biodegradable	Company data

12.3. Bioaccumulative potential

Dibenzoyl peroxide

Value	Source
3.2 Bioaccumulation is unlikely.	Company data

12.5 Results of PBT and vPvB assessment

Ethylene dibenzoate

Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).	Company data

Dibenzoyl peroxide

Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).	Company data

12.6 Other adverse effects

No information available.


UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

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 16 09 03* peroxides, e.g., hydrogen peroxide
Uncleaned empty packaging The return of packaging materials is regulated by the Interseroh system.

SECTION 14: Transport information

	ADR / RID	IMDG	IATA
14.1 N° ONU		3106	
14.2 UN proper shipping name		ORGANIC PEROXIDE TYPE D, SOLID	ORGANIC PEROXIDE TYPE D, SOLID
14.3 Transport hazard classes label	5.2 		
Danger releasing substance	Dibenzoyl peroxide		
14.4 Packing Group	Not applicable.	Not applicable.	Not applicable.
14.5 Dangerous for Environment	Yes - U Environmentally hazardous	Yes – U Marine pollutant	Yes - U Environmentally hazardous
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 ans IBC code)	Not applicable.		
14.8 Additional information	Packaging type OP7		

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.
MAL-Code 0-4

15.2 Chemical safety assessment

No information available.

UltraCrack L270 MMA
[Part.1 - Base.A | Part.2 – Catalyst]

SECTION 16: Other information

Relevant H phrases

H241 Heating may cause a fire or explosion.
H242 Heating may cause a fire.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Wording of the hazard classes

Aquatic Chronic: Hazardous to the aquatic environment
Org. Perox.: Organic peroxide
Eye Irrit.: Serious eye irritation
Skin Sens.: Skin sensitization
Aquatic Acute: Hazardous to the aquatic environment

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification	Evaluation
H242: Heating may cause a fire.	The product was tested according to the official UN test methods: the BAM Fallhammer test for impact sensitivity and the BAM friction sensitivity test. Result: Slightly sensitive.
Org. Perox. D; H242	Calculated
Eye Irrit. 2; H319	Calculated
Skin Sens. 1; H317	Calculated
Aquatic Acute 1; H400	Calculated
Aquatic Chronic 1; H410	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.