VuduGlu™ VM100 Black Methacrylate Adhesive Part A

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 25/09/2022 Revision date: 21/12/2024 Supersedes version of: 10/05/2024 Version: 4.0

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

1.1. Product identifier

Product form : Mixture

Product name : VuduGlu VM100 Black Methacrylate Adhesive Part A

UFI : FEEG-59F1-J203-E4UX

Product code : VM100B-A

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

Relevant identified uses

Main use category : Industrial use,Professional use

Use of the substance/mixture : Adhesives

1.3. Details of the supplier of the safety data sheet

Company name: Easy Composites Ltd
Unit 39, Park Hall Business Village
Longton, Stoke on Trent Staffordshire
ST3 5XA
United Kingdom
+44 (0) 1782 454499

sales@easycomposites.com

1.4. Emergency telephone number

Emergency number +44 (0) 1782 454499

(office hours only)

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Extremely flammable liquid and vapour. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS05 GHS07

Signal word (CLP) : Danger

Contains : Hydroperoxide, 1-methyl-1-phenylethyl; PTSC; 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester; methacrylic acid; 2-methylpropenoic acid; Methyl methacrylate

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
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.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapours, spray, mist.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective clothing, eye protection, face protection, protective gloves.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methyl methacrylate substance with a Community workplace exposure limit (Note D)	CAS-No.: 80-62-6 EC-No.: 201-297-1 EC Index-No.: 607-035-00-6 REACH-no: 01-2119452498-28	≥ 40 – < 60	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335
2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester	CAS-No.: 109-16-0 EC-No.: 203-652-6 REACH-no: 01-2119969287-21	≥ 7 – < 10	Skin Sens. 1B, H317
methacrylic acid; 2-methylpropenoic acid (Note D)	CAS-No.: 79-41-4 EC-No.: 201-204-4 EC Index-No.: 607-088-00-5 REACH-no: 01-2119463884-26	≥ 5 – < 7	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
PTSC	CAS-No.: 98-59-9 EC-No.: 202-684-8	≥ 1 – < 3	Met. Corr. 1, H290 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
Hydroperoxide, 1-methyl-1-phenylethyl	CAS-No.: 80-15-9 EC-No.: 201-254-7 EC Index-No.: 617-002-00-8 REACH-no: 01-2119475796-19	≥ 1 – < 3	Org. Perox. E, H242 Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 STOT RE 2, H373 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
2,6-di-tert-butyl-p-cresol	EC-No.: 204-881-4	1 - 3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cumene substance with a Community workplace exposure limit	CAS-No.: 98-82-8 EC-No.: 202-704-5 EC Index-No.: 601-024-00-X	< 0.1	Flam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Methanol substance with a Community workplace exposure limit	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-2119433307-44	< 0.25	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 1, H370

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
methacrylic acid; 2-methylpropenoic acid	CAS-No.: 79-41-4 EC-No.: 201-204-4 EC Index-No.: 607-088-00-5 REACH-no: 01-2119463884-26	(1 ≤ C ≤ 100) STOT SE 3; H335
Hydroperoxide, 1-methyl-1-phenylethyl	CAS-No.: 80-15-9 EC-No.: 201-254-7 EC Index-No.: 617-002-00-8 REACH-no: 01-2119475796-19	(0 < C < 10) STOT SE 3; H335 (1 ≤ C < 3) Eye Irrit. 2; H319 (3 ≤ C < 10) Skin Irrit. 2; H315 (3 ≤ C < 10) Eye Dam. 1; H318 (10 ≤ C ≤ 100) Skin Corr. 1B; H314
Methanol	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-2119433307-44	(3 ≤ C < 10) STOT SE 2; H371 (10 ≤ C ≤ 100) STOT SE 1; H370

Note D: Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words ‘non-stabilised’.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Wash immediately with lots of water. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. Call a physician immediately.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water for 15 minutes. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects : Causes serious eye damage. May cause an allergic skin reaction.

Symptoms/effects after inhalation : Shortness of breath. Coughing. May cause respiratory irritation.

Symptoms/effects after skin contact : May cause an allergic skin reaction. irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Causes serious eye damage. Lacrimation. redness, itching, tears. stinging.

Symptoms/effects after ingestion : Ingestion may cause nausea and vomiting. Irritation of the oral mucous membranes.

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. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable liquid and vapour.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so. Evacuate area.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Cover spill with non combustible material, e.g.: sand, earth, vermiculite.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Keep only in the original container in a cool,well-ventilated place away from combustible materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

cumene (98-82-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-Phenylpropane (Cumene)
IOEL TWA	50 mg/m³
	10 ppm
IOEL STEL	250 mg/m³
	50 ppm
Remark	Skin. During exposure monitoring, account should be taken of relevant biological monitoring values as suggested by the Scientific Committee on Occupational Exposure Limits for Chemicals Agents (SCOEL)
Regulatory reference	COMMISSION DIRECTIVE (EU) 2019/1831
United Kingdom - Occupational Exposure Limits	
Local name	Cumene
WEL TWA (OEL TWA)	125 mg/m³

cumene (98-82-8)	
	25 ppm
WEL STEL (OEL STEL)	250 mg/m³
	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Methanol (67-56-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Methanol
IOEL TWA	260 mg/m³
	200 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
United Kingdom - Occupational Exposure Limits	
Local name	Methanol
WEL TWA (OEL TWA)	266 mg/m³
	200 ppm
WEL STEL (OEL STEL)	333 mg/m³
	250 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

PTSC (98-59-9)	
United Kingdom - Occupational Exposure Limits	
Local name	p-Toluenesulphonyl chloride
WEL STEL (OEL STEL)	5 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Methacrylic acid
WEL TWA (OEL TWA)	72 mg/m³
	20 ppm
WEL STEL (OEL STEL)	143 mg/m³
	40 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Methyl methacrylate (80-62-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Methyl methacrylate
IOEL TWA	50 ppm

Methyl methacrylate (80-62-6)	
IOEL STEL	100 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
United Kingdom - Occupational Exposure Limits	
Local name	Methyl methacrylate
WEL TWA (OEL TWA)	208 mg/m³
	50 ppm
WEL STEL (OEL STEL)	416 mg/m³
	100 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

DNEL and PNEC

Hydroperoxide, 1-methyl-1-phenylethyl (80-15-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	6 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.0031 mg/l
PNEC aqua (marine water)	0.00031 mg/l
PNEC aqua (intermittent, freshwater)	0.031 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.023 mg/kg dwt
PNEC sediment (marine water)	0.0023 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0029 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.35 mg/l

PTSC (98-59-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.5 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (STP)	
PNEC sewage treatment plant	17.3 mg/l

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	13.9 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	48.5 mg/m³

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	8.33 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	14.5 mg/m³
Long-term - systemic effects, dermal	8.33 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0164 mg/l
PNEC aqua (marine water)	0.00164 mg/l
PNEC aqua (intermittent, freshwater)	0.0164 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.185 mg/kg dwt
PNEC sediment (marine water)	0.0185 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0274 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1.7 mg/l

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
DNEL/DMEL (Workers)	
Acute - local effects, dermal	1 % in mixture
Long-term - systemic effects, dermal	4.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	29.6 mg/m³
Long-term - local effects, inhalation	88 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, dermal	1 % in mixture
Long-term - systemic effects, inhalation	6.3 mg/m³
Long-term - systemic effects, dermal	2.55 mg/kg bodyweight/day
Long-term - local effects, inhalation	6.55 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.82 mg/l
PNEC aqua (marine water)	0.82 mg/l
PNEC aqua (intermittent, freshwater)	0.82 mg/l
PNEC (Soil)	
PNEC soil	1.2 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Chemical goggles or safety glasses. Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety goggles	Droplet	With side shields	EN 166

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Chemically resistant protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.44		EN ISO 374

Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	white.
Appearance	:	Paste.
Odour	:	Pungent.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	> 60 °C
Flammability	:	Extremely flammable liquid and vapour.
Explosive properties	:	Not explosive.
Oxidising properties	:	Non oxidizing material according to EC criteria.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	15 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	4.5 – 5.5
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	500000 mPa·s

Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	Not available
Relative vapour density at 20°C	:	0.98
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Hydroperoxide, 1-methyl-1-phenylethyl (80-15-9)	
LD50 oral rat	382 mg/kg
LD50 oral	382 mg/kg
LD50 dermal rat	1060 mg/kg Source: HSDB
LD50 dermal	530 mg/kg
LC50 Inhalation - Rat [ppm]	220 ppm Animal: rat, Animal sex: male, Remarks on results: other:
LC50 Inhalation - Rat (Dust/Mist)	1.24 mg/l/4h

cumene (98-82-8)	
LD50 oral rat	2910 mg/kg Source: HSDB
LD50 oral	2700 mg/kg
LD50 dermal	10600 mg/kg

cumene (98-82-8)	
LC50 Inhalation - Rat (Dust/Mist)	39.3 mg/l/4h

Methanol (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 oral	1400 mg/kg
LD50 dermal rabbit	300 mg/kg Source: ECHA
LD50 dermal	15800 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	85000 mg/l

PTSC (98-59-9)	
LD50 oral rat	4680 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 4280 - 5130
LD50 dermal rabbit	> 5010 mg/kg

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
LD50 oral rat	10837 mg/kg Source: NLM,THOMSON
LD50 oral	> 2000 mg/kg

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
LD50 oral rat	1320 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	2224 mg/kg
LD50 dermal rabbit	500 – 1000 mg/kg bodyweight Animal: rabbit, Guideline: other:
LD50 dermal	500 mg/kg
LC50 Inhalation - Rat	7.1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
LC50 Inhalation - Rat (Dust/Mist)	7.1 mg/l/4h

Methyl methacrylate (80-62-6)	
LD50 oral rat	7900 mg/kg Source: NITE, HSDB, ChemIDplus
LD50 oral	7800 mg/kg
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	5000 mg/kg
LC50 Inhalation - Rat [ppm]	7093 ppm Source: HSDB
LC50 Inhalation - Rat (Vapours)	29.04 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
pH: 4.5 – 5.5

Additional information : (OECD 431 method)

Methanol (67-56-1)	
pH	12.1 Source: Gestis

Methyl methacrylate (80-62-6)	
pH	< 1

Serious eye damage/irritation : Causes serious eye damage.
pH: 4.5 – 5.5

Methanol (67-56-1)	
pH	12.1 Source: Gestis

Methyl methacrylate (80-62-6)	
pH	< 1

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

cumene (98-82-8)	
IARC group	2B - Possibly carcinogenic to humans

Methyl methacrylate (80-62-6)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Methanol (67-56-1)	
NOAEL (animal/male, F0/P)	< 1000 mg/kg bodyweight Animal: mouse, Animal sex: male

STOT-single exposure : May cause respiratory irritation.

cumene (98-82-8)	
STOT-single exposure	May cause respiratory irritation.

Methanol (67-56-1)	
STOT-single exposure	Causes damage to organs.

Methyl methacrylate (80-62-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Hydroperoxide, 1-methyl-1-phenylethyl (80-15-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

PTSC (98-59-9)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
LOAEC (inhalation, rat, gas, 90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation, rat, gas, 90 days)	100 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
LOAEC (inhalation, rat, gas, 90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified

Methyl methacrylate (80-62-6)	
Viscosity, kinematic	0.561 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

Hydroperoxide, 1-methyl-1-phenylethyl (80-15-9)	
LC50 - Fish [1]	3.9 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	18.84 mg/l Test organisms (species): Daphnia magna
ErC50 algae	3.1 mg/l
NOEC chronic algae	1 mg/l

cumene (98-82-8)	
LC50 - Fish [1]	2.7 mg/l
EC50 - Crustacea [1]	1.2 mg/l
EC50 - Other aquatic organisms [1]	4 mg/l waterflea
EC50 - Other aquatic organisms [2]	2.6 mg/l
ErC50 algae	2.01 mg/l Source: ECHA
NOEC chronic crustacea	0.35 mg/l
NOEC chronic algae	0.22 mg/l

Methanol (67-56-1)	
LC50 - Fish [1]	15400 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	1340 mg/l
EC50 - Other aquatic organisms [1]	10000 mg/l waterflea
EC50 - Other aquatic organisms [2]	12000 mg/l
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

PTSC (98-59-9)	
LC50 - Fish [2]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [2]	> 334 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
LC50 - Fish [1]	16.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
EC50 72h - Algae [2]	72.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
LC50 - Fish [1]	85 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 130 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	45 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	20 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	14 mg/l
NOEC chronic fish	10 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '35 d'
NOEC chronic crustacea	53 mg/l
NOEC chronic algae	9.8 mg/l

Methyl methacrylate (80-62-6)	
LC50 - Fish [1]	> 79 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	69 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 110 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	68 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	37 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	9.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '35 d'
NOEC chronic crustacea	3.5 mg/l
NOEC chronic algae	86 mg/l

12.2. Persistence and degradability

M100A	
Persistence and degradability	Not rapidly degradable

Hydroperoxide, 1-methyl-1-phenylethyl (80-15-9)	
Persistence and degradability	Not rapidly degradable

cumene (98-82-8)	
Persistence and degradability	Not rapidly degradable

2,6-di-tert-butyl-p-cresol	
Persistence and degradability	Not rapidly degradable

Methanol (67-56-1)	
Persistence and degradability	Not rapidly degradable

PTSC (98-59-9)	
Persistence and degradability	Not rapidly degradable

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
Persistence and degradability	Not rapidly degradable

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
Persistence and degradability	Rapidly degradable

Methyl methacrylate (80-62-6)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Hydroperoxide, 1-methyl-1-phenylethyl (80-15-9)	
Partition coefficient n-octanol/water (Log Pow)	2.16

cumene (98-82-8)	
Partition coefficient n-octanol/water (Log Pow)	3.66 Source: HSDB

Methanol (67-56-1)	
Partition coefficient n-octanol/water (Log Pow)	-0.77 Source: HSDB,CHemIDplus

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (109-16-0)	
Partition coefficient n-octanol/water (Log Pow)	1.88 Source: ChemIDplus

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
Partition coefficient n-octanol/water (Log Pow)	0.93 Source: HSDB

Methyl methacrylate (80-62-6)	
Partition coefficient n-octanol/water (Log Pow)	1.38 Source: HSDB

12.4. Mobility in soil

Methanol (67-56-1)	
Mobility in soil	2.75 Source: HSDB

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

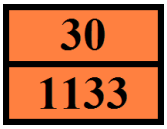
SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN
14.1. UN number or ID number			
UN 1133	UN 1133	UN 1133	UN 1133
14.2. UN proper shipping name			
ADHESIVES (Methyl methacrylate)	ADHESIVES (Methyl methacrylate)	Adhesives (Methyl methacrylate)	ADHESIVES (Methyl methacrylate)
Transport document description			
UN 1133 ADHESIVES (Methyl methacrylate), 3, III, (D/E)	UN 1133 ADHESIVES (Methyl methacrylate), 3, III	UN 1133 Adhesives (Methyl methacrylate), 3, III	UN 1133 ADHESIVES (Methyl methacrylate), 3, III
14.3. Transport hazard class(es)			
3	3	3	3
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-E EmS-No. (Spillage): S-D	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	F1
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T2
Portable tank and bulk container special provisions (ADR)	:	TP1
Tank code (ADR)	:	LGBF
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Operation (ADR)	:	S2
Hazard identification number (Kemler No.)	:	30
Orange plates	:	
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•3Y

Transport by sea

Special provisions (IMDG)	:	223, 955

Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
Special packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T2
Tank special provisions (IMDG)	:	TP1
Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Adhesives are solutions of gums, resins, etc., usually volatile due to the solvents. Miscibility with water depends upon their composition.

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y344
PCA limited quantity max net quantity (IATA)	:	10L
PCA packing instructions (IATA)	:	355
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	366
CAO max net quantity (IATA)	:	220L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	3L

Inland waterway transport

Classification code (ADN)	:	F1
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	0

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
	Special provisions for carriage – Packages (RID)	**Added**
	Special packing provisions (RID)	**Added**
	IBC packing instructions (IMDG)	**Added**
	Revision date	**Modified**
	Colis express (express parcels) (RID)	**Added**
	Special provisions (IMDG)	**Added**
	Special provisions for carriage - Packages (ADR)	**Added**
	Special packing provisions (ADR)	**Added**
	Portable tank and bulk container instructions (ADR)	**Modified**
	Portable tank and bulk container special provisions (ADR)	**Modified**
	Tank code (ADR)	**Modified**
	Number of blue cones/lights (ADN)	**Modified**
	Excepted quantities (ADN)	**Modified**
	Limited quantities (ADN)	**Modified**
	Hazard identification number (RID)	**Modified**
	Transport category (RID)	**Modified**
	Tank codes for RID tanks (RID)	**Modified**
	Portable tank and bulk container special provisions (RID)	**Modified**
	Portable tank and bulk container instructions (RID)	**Modified**
	Mixed packing provisions (RID)	**Modified**
	Packing instructions (RID)	**Modified**
	Excepted quantities (RID)	**Modified**
	Limited quantities (RID)	**Modified**
	CAO max net quantity (IATA)	**Modified**
	CAO packing instructions (IATA)	**Modified**
	PCA max net quantity (IATA)	**Modified**
	PCA packing instructions (IATA)	**Modified**

Indication of changes		
Section	**Changed item**	**Comments**
	PCA limited quantity max net quantity (IATA)	**Modified**
	PCA Limited quantities (IATA)	**Modified**
	PCA Excepted quantities (IATA)	**Modified**
	Limited quantities (IMDG)	**Modified**
	Stowage category (IMDG)	**Modified**
	Tank special provisions (IMDG)	**Modified**
	Tank instructions (IMDG)	**Modified**
	Excepted quantities (IMDG)	**Modified**
	Special provisions for carriage - Operation (ADR)	**Modified**
	Mixed packing provisions (ADR)	**Modified**
	Packing instructions (ADR)	**Modified**
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	**Modified**
2.2	Precautionary statements (CLP)	**Modified**
2.2	Hazard statements (CLP)	**Modified**
3	Composition/information on ingredients	**Modified**
5.3	EAC code	**Modified**
9	Boiling point	**Added**
14.6	Special packing provisions (IMDG)	**Added**
14.6	Hazard identification number (Kemler No.)	**Modified**
14.6	Packing instructions (IMDG)	**Modified**
14.6	Transport category (ADR)	**Modified**
14.6	Excepted quantities (ADR)	**Modified**
14.6	Limited quantities (ADR)	**Modified**

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard

Abbreviations and acronyms:	
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3

Full text of H- and EUH-statements:	
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Met. Corr. 1	Corrosive to metals, Category 1
Org. Perox. E	Organic Peroxides, Type E
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 1	Specific target organ toxicity – single exposure, Category 1
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

VuduGlu™ VM100 Black Methacrylate Adhesive Part B

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 24/09/2022 Revision date: 21/12/2024 Supersedes version of: 24/04/2023 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : VuduGlu VM100 Black Methacrylate Adhesive Part B
UFI : U0QG-S9FR-520K-J94D
Product code : VM100B-B

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

Relevant identified uses

Main use category : Professional use,Industrial use
Use of the substance/mixture : Adhesives, binding agents

1.3. Details of the supplier of the safety data sheet

Company name: Easy Composites Ltd
Unit 39, Park Hall Business Village
Longton, Stoke on Trent Staffordshire
ST3 5XA
United Kingdom
+44 (0) 1782 454499

sales@easycomposites.com

1.4. Emergency telephone number

Emergency number +44 (0) 1782 454499

(office hours only)

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Skin corrosion/irritation, Category 2	H315
Skin sensitisation, Category 1	H317
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Extremely flammable liquid and vapour. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS05 GHS07 GHS09

Signal word (CLP)	:	Danger
Contains	:	Methyl methacrylate
Hazard statements (CLP)	:	H225 - Highly flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing mist, vapours, spray. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P321 - Specific treatment (see supplemental first aid instruction on this label). P391 - Collect spillage.
EUH-statements	:	EUH071 - Corrosive to the respiratory tract.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methyl methacrylate substance with a Community workplace exposure limit (Note D)	CAS-No.: 80-62-6 EC-No.: 201-297-1 EC Index-No.: 607-035-00-6 REACH-no: 01-2119452498-28	≥ 60 – < 80	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335
Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl-2-propyl-	CAS-No.: 34562-31-7 EC-No.: 252-091-3	≥ 3	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,6-di-tert-butyl-p-cresol	EC-No.: 204-881-4	≥ 0.25 – < 0.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C6 through C13 and boiling in the range of approximately 65°C to 230°C (149°F to 446°F).] substance with a Community workplace exposure limit (Note P)	CAS-No.: 64742-48-9 EC-No.: 265-150-3 EC Index-No.: 649-327-00-6	< 0.0015	Asp. Tox. 1, H304

Note D: Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

Note P: Note P : The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262- P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : May cause respiratory irritation. May cause an allergic skin reaction.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : May cause slight irritation to eyes. redness, itching, tears. stinging.

Symptoms/effects after ingestion : Ingestion may cause nausea and vomiting.

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. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable liquid and vapour.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing mist, spray, vapours. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Cover spill with non combustible material, e.g.: sand, earth, vermiculite.
Methods for cleaning up : Absorb remaining liquid with sand or inert absorbent and remove to safe place. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing mist, spray, vapours. Avoid contact with skin and eyes.
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Methyl methacrylate (80-62-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Methyl methacrylate
IOEL TWA	50 ppm
IOEL STEL	100 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
United Kingdom - Occupational Exposure Limits	
Local name	Methyl methacrylate
WEL TWA (OEL TWA)	208 mg/m³
	50 ppm
WEL STEL (OEL STEL)	416 mg/m³
	100 ppm

Methyl methacrylate (80-62-6)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C6 through C13 and boiling in the range of approximately 65°C to 230°C (149°F to 446°F).] (64742-48-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	White spirit Type 3
IOEL TWA	116 mg/m³
	20 ppm
IOEL STEL	290 mg/m³
	50 ppm
Remark	Skin. (Year of adoption 2007)
Regulatory reference	SCOEL Recommendations

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
Wear protective gloves.
Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses, Safety goggles	Droplet	With side shields	EN 166

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Chemically resistant protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.4		EN ISO 374

Respiratory protection

Respiratory protection:
Provide local exhaust or general room ventilation to minimize vapour concentrations. In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Black.
Appearance	:	Paste.
Odour	:	Characteristic odour.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	> 65 °C
Flammability	:	Not applicable
Lower explosion limit	:	2.1 vol %
Upper explosion limit	:	12.5 vol %
Flash point	:	11.5 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	400000 mPa·s
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	Not available
Relative vapour density at 20°C	:	0.906
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl-2-propyl- (34562-31-7)	
LD50 oral rat	> 500 mg/kg
LD50 dermal rabbit	> 1000 mg/kg

Methyl methacrylate (80-62-6)	
LD50 oral rat	7900 mg/kg Source: NITE, HSDB, ChemIDplus
LD50 oral	7800 mg/kg
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	5000 mg/kg
LC50 Inhalation - Rat [ppm]	7093 ppm Source: HSDB
LC50 Inhalation - Rat (Vapours)	29.04 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Methyl methacrylate (80-62-6)	
pH	< 1

Serious eye damage/irritation : Not classified

Methyl methacrylate (80-62-6)	
pH	< 1

Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Methyl methacrylate (80-62-6)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.

Methyl methacrylate (80-62-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Methyl methacrylate (80-62-6)	
Viscosity, kinematic	0.561 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Toxic to aquatic life with long lasting effects.

Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl-2-propyl- (34562-31-7)	
EC50 - Crustacea [1]	22 mg/l Daphnia magna; OECD 202
EC50 72h - Algae [1]	40 mg/l Raphidocelis subcapitata; OECD 201

Methyl methacrylate (80-62-6)	
LC50 - Fish [1]	> 79 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	69 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 110 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	68 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	37 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	9.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '35 d'
NOEC chronic crustacea	3.5 mg/l
NOEC chronic algae	86 mg/l

12.2. Persistence and degradability

M100B Black	
Persistence and degradability	Not rapidly degradable

Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl-2-propyl- (34562-31-7)	
Persistence and degradability	Not rapidly degradable

2,6-di-tert-butyl-p-cresol	
Persistence and degradability	Not rapidly degradable

Methyl methacrylate (80-62-6)	
Persistence and degradability	Rapidly degradable

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C6 through C13 and boiling in the range of approximately 65°C to 230°C (149°F to 446°F).] (64742-48-9)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl-2-propyl- (34562-31-7)	
Partition coefficient n-octanol/water (Log Pow)	> 6.5 (at 25 °C (at pH 5.7)

Methyl methacrylate (80-62-6)	
Partition coefficient n-octanol/water (Log Pow)	1.38 Source: HSDB

12.4. Mobility in soil

Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl-2-propyl- (34562-31-7)	
Mobility in soil	31590 Source: EPI Suite

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN
14.1. UN number or ID number			
UN 1133	UN 1133	UN 1133	UN 1133
14.2. UN proper shipping name			
ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)	ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)	Adhesives (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)	ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)
Transport document description			
UN 1133 ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate), 3, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 1133 ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate), 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1133 Adhesives (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate), 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1133 ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate), 3, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)			
3	3	3	3
14.4. Packing group			
III	III	III	III

ADR	IMDG	IATA	ADN
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-E EmS-No. (Spillage): S-D	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	F1
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC02, R001
Special packing provisions (ADR)	:	PP1, BB4
Mixed packing provisions (ADR)	:	MP19
Transport category (ADR)	:	3
Special provisions for carriage - Operation (ADR)	:	S2
Tunnel restriction code (ADR)	:	E
EAC code	:	•3YE

Transport by sea

Special provisions (IMDG)	:	223, 955
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
Special packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T2
Tank special provisions (IMDG)	:	TP1
Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Adhesives are solutions of gums, resins, etc., usually volatile due to the solvents. Miscibility with water depends upon their composition.

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y344
PCA limited quantity max net quantity (IATA)	:	10L
PCA packing instructions (IATA)	:	355
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	366
CAO max net quantity (IATA)	:	220L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	3L

Inland waterway transport

Classification code (ADN)	:	F1
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	0

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
	Supersedes version of	**Modified**
	Revision date	**Modified**
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	**Modified**
2.2	Precautionary statements (CLP)	**Modified**
2.2	Hazard statements (CLP)	**Modified**
2.2	EUH-statements	**Added**
2.2	Hazard pictograms (CLP)	**Modified**
3	Composition/information on ingredients	**Modified**
9	Boiling point	**Added**

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

Abbreviations and acronyms:	
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1

Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
EUH071	Corrosive to the respiratory tract.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.