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: 10/05/2024 Supersedes version of: 10/05/2024 Version: 3.1

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

1.2.1. Relevant identified uses

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

1.2.2. Uses advised against

No additional information available

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	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	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 1	H224
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) : H224 - Extremely 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.
P235 - Keep cool.
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).
P403+P235 - Store in a well-ventilated place. Keep cool.

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 is 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

3.1. Substances

Not applicable

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 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317
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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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
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 : 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

6.1.1. 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.

6.1.2. 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

8.1.1 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
IOEL TWA [ppm]	10 ppm
IOEL STEL	250 mg/m³
IOEL STEL [ppm]	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) [1]	125 mg/m³

cumene (98-82-8)	
WEL TWA (OEL TWA) [2]	25 ppm
WEL STEL (OEL STEL)	250 mg/m³
WEL STEL (OEL STEL) [ppm]	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
IOEL TWA [ppm]	200 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
United Kingdom - Occupational Exposure Limits	
Local name	Methanol
WEL TWA (OEL TWA) [1]	266 mg/m³
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	333 mg/m³
WEL STEL (OEL STEL) [ppm]	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) [1]	72 mg/m³
WEL TWA (OEL TWA) [2]	20 ppm
WEL STEL (OEL STEL)	143 mg/m³
WEL STEL (OEL STEL) [ppm]	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 [ppm]	50 ppm

Methyl methacrylate (80-62-6)	
IOEL STEL [ppm]	100 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
United Kingdom - Occupational Exposure Limits	
Local name	Methyl methacrylate
WEL TWA (OEL TWA) [1]	208 mg/m³
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	416 mg/m³
WEL STEL (OEL STEL) [ppm]	100 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

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

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. 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

8.2.2.2. 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

8.2.2.3. Respiratory protection

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. 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	:	Not available
Flammability	:	Extremely flammable liquid and vapour.
Explosive properties	:	Not explosive.
Oxidising properties	:	Non oxidizing material according to EC criteria.
Explosive limits	:	Not available
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

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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
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.

Not rapidly degradable

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)
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)

methacrylic acid; 2-methylpropenoic acid (79-41-4)	
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

No additional information available

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

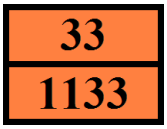
In accordance with ADR / IMDG / IATA / ADN

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	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) : 500ml
Excepted quantities (ADR) : E3
Packing instructions (ADR) : P001

Mixed packing provisions (ADR)	:	MP7, MP17
Portable tank and bulk container instructions (ADR)	:	T11
Portable tank and bulk container special provisions (ADR)	:	TP1, TP8, TP27
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	1
Special provisions for carriage - Operation (ADR)	:	S2, S20
Hazard identification number (Kemler No.)	:	33
Orange plates	:	
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•3YE

Transport by sea

Limited quantities (IMDG)	:	500 ml
Excepted quantities (IMDG)	:	E3
Packing instructions (IMDG)	:	P001
Tank instructions (IMDG)	:	T11
Tank special provisions (IMDG)	:	TP1, TP8, TP27
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-D
Stowage category (IMDG)	:	E
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)	:	E3
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	351
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	361
CAO max net quantity (IATA)	:	30L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	3L

Inland waterway transport

Classification code (ADN)	:	F1
Limited quantities (ADN)	:	500 ml
Excepted quantities (ADN)	:	E3
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1

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

15.1.1. 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)

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)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Supersedes version of	Modified	
	Packing group (RID)	Modified	
4.2	Symptoms/effects after skin contact	Modified	
14.4	Packing group (ADR)	Modified	
14.4	Packing group (IMDG)	Modified	
14.4	Packing group (ADN)	Modified	
14.4	Packing group (IATA)	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:	
H224	Extremely flammable liquid and vapour.
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: 31/01/2024 Supersedes version of: 25/10/2023 Version: 2.1

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

1.2.1. Relevant identified uses

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

1.2.2. Uses advised against

No additional information available

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	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	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 1	H224
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 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. 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 GHS07

Signal word (CLP) : Danger

Contains : Methyl methacrylate

Hazard statements (CLP) : H224 - Extremely flammable liquid and vapour.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
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.
P235 - Keep cool.
P261 - Avoid breathing mist, spray, vapours.
P280 - Wear protective clothing, eye protection, face protection, protective gloves.
P403+P235 - Store in a well-ventilated place. Keep cool.

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 is 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

3.1. Substances

Not applicable

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 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319
2,6-di-tert-butyl-p-cresol	EC-No.: 204-881-4	≥ 0.25 – < 0.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C7 through C12 and boiling in the range of approximately 90°C to 230°C (194°F to 446 °F).] substance with a Community workplace exposure limit (Note P)	CAS-No.: 64742-82-1 EC-No.: 265-185-4 EC Index-No.: 649-330-00-2 REACH-no: 01-2119458049-33	≥ 0.0015	Flam. Liq. 3, H226 Muta. 1B, H340 Carc. 1B, H350 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
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 : 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 : The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply.
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. irritation (itching, redness, blistering).
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

6.1.1. 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.

6.1.2. 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.
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

8.1.1 National occupational exposure and biological limit values

naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C7 through C12 and boiling in the range of approximately 90°C to 230°C (194°F to 446 °F).] (64742-82-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	White spirit Type 1
IOEL TWA	116 mg/m³
IOEL TWA [ppm]	20 ppm
IOEL STEL	290 mg/m³
IOEL STEL [ppm]	50 ppm
Remark	Skin. (Year of adoption 2007)
Regulatory reference	SCOEL Recommendations

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
IOEL TWA [ppm]	20 ppm
IOEL STEL	290 mg/m³
IOEL STEL [ppm]	50 ppm
Remark	Skin. (Year of adoption 2007)
Regulatory reference	SCOEL Recommendations

Methyl methacrylate (80-62-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Methyl methacrylate
IOEL TWA [ppm]	50 ppm
IOEL STEL [ppm]	100 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
United Kingdom - Occupational Exposure Limits	
Local name	Methyl methacrylate
WEL TWA (OEL TWA) [1]	208 mg/m³
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	416 mg/m³

Methyl methacrylate (80-62-6)	
WEL STEL (OEL STEL) [ppm]	100 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

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

8.2.2. Personal protection equipment

Personal protective equipment:
Wear protective gloves.

Personal protective equipment symbol(s):

8.2.2.1. 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

8.2.2.2. 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

8.2.2.3. Respiratory protection

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. 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	:	Off-white.
Appearance	:	Paste.
Odour	:	Characteristic odour.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Extremely flammable liquid and vapour.
Explosive limits	:	Not available
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

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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 dermal rabbit	> 1000 mg/kg

naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C7 through C12 and boiling in the range of approximately 90°C to 230°C (194°F to 446 °F).] (64742-82-1)	
LD50 oral rat	> 5000 mg/kg Source: IUCLID
LD50 dermal rabbit	> 3160 mg/kg Source: IUCLID

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

naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C7 through C12 and boiling in the range of approximately 90°C to 230°C (194°F to 446 °F).] (64742-82-1)	
STOT-repeated exposure	Causes damage to organs (central nervous system) through prolonged or repeated exposure.

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.
Not rapidly degradable

naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C7 through C12 and boiling in the range of approximately 90°C to 230°C (194°F to 446 °F).] (64742-82-1)	
LC50 - Other aquatic organisms [1]	4.3 mg/l Source: IUCLID

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

No additional information available

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)

naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C7 through C12 and boiling in the range of approximately 90°C to 230°C (194°F to 446 °F).] (64742-82-1)	
Partition coefficient n-octanol/water (Log Pow)	2.1 – 6 Source: IUCLID

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)	UN 1133 ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate), 3, II	UN 1133 Adhesives (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate), 3, II	UN 1133 ADHESIVES (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate), 3, III
14.3. Transport hazard class(es)			
3	3	3	3

ADR	IMDG	IATA	ADN
			
14.4. Packing group			
III	II	II	III
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	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, 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

Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
Special packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP8
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-D
Stowage category (IMDG)	:	B
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)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
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

15.1.1. 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)

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)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

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

Abbreviations and acronyms:	
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
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 Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.

Full text of H- and EUH-statements:	
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.
H340	May cause genetic defects.
H350	May cause cancer.
H372	Causes 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.
Muta. 1B	Germ cell mutagenicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity – Repeated exposure, 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.