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

1.1 Product identifier

GRAFLOCK 3270

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

Relevant identified uses: Glue used to protect and seal threaded joints up to 1 inch (25mm) in gearboxes, engine block stoppers, valve sets.

Uses advised against: No data available

1.3 Details of the supplier of the safety data sheet:

Supplier:	Madejski Sp. J.
Street address:	ul. Makuszyńskiego 28
Country/Postcode:	Poland, 31-752 Kraków
Telephone number:	+48 (12) 643 67 67

E-mail	info@madejski.com.pl
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1.4 Emergency telephone number:	112
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Mixture:

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

Classification of the mixture	Regulation (EC) No 1272/2008 (CLP)
Hazard	
Physical and chemical properties	Not classified
Human	Skin Irrit.2 H315 Skin Sens.1 H317 Eye Irrit.2 H319 STOT SE 3; H335
Environment	Aquatic Chronic 3 H412

2.2 Label elements:


Contains: 2-hydroxyethyl methacrylate, cumene hydroperoxide.

Supplemental information on the label:

Not applicable

Hazard pictograms:



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Signal word:
WARNING

Hazard statements:

- H315** Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

- P101** If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/container in accordance with applicable regulations.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients


3.1 Substances: Not applicable

3.2 Mixtures:

Name	Identifiers	[% weight]	Classification according to Regulation (EC) No 1278/2008 (CLP).
2-hydroxyethyl methacrylate	Index No: 607-124-00-X EC No: 212-782-2 CAS No: 868-77-9 REACH Registration No:---	35-65	Skin Irrit.2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319
Methacrylic acid, monoester with propane-1,2-diol	Index No: --- WE No: 248-666-3 CAS No: 27813-02-1 REACH Registration No:---	25-35	Skin Sens. 1 H317 Eye Irrit.2 H319
cumene hydroperoxide	Index No: 617-002-00-8 WE No: 201-254-7 CAS No: 80-15-9 REACH Registration No:---	1-2,6	Org. Perox. E H242 Acute Tox. 4 H302 Acute Tox. 4 H312 Skin Corr. 1B H314 Acute Tox.3 H331 STOT RE 2 H373 Aquatic Chronic 2 H411

Specific Concentration limits for cumene hydroperoxide:

- Eye Dam. 1; H318: 3 % ≤ C < 10 %
Skin Corr. 1B; H314: C ≥ 10 %
STOT SE 3; H335: C < 10 %
Skin Irrit. 2; H315: 3 % ≤ C < 10 %

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Eye Irrit. 2; H319: 1 % ≤ C < 3 %

The Full Text for all H-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Following eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. In case of irritation, redness get medical attention.

Following inhalation: Move the exposed person to fresh air at once. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

Following skin contact: Immediately remove contaminated clothing. Wash the skin with soap and water. Contaminated clothing should be washed before re-use. Get medical attention promptly if symptoms occur after washing.

Following ingestion: Do not induce vomiting. Immediately rinse mouth. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Seek medical advice. Provide ventilation.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

If any symptoms persist seek medical advice and show the msds or label.

Notes for the doctor: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray

Unsuitable extinguishing media: do not use water in a jet.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition or combustion may liberate carbon oxides.

5.3 Advice for firefighters

Special Fire Fighting Procedures: Wear full protective clothing and self-contained breathing apparatus.

Protective equipment for fire-fighters: Keep containers cool by spraying with water. If possible remove containers from the danger zone. Prevent from spreading or entering drains, ditches or rivers. Dispose of released and contained material in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Removed from the danger area all persons not involved in the emergency. If necessary, order the evacuation. Avoid contact with skin, eyes. Avoid inhalation of vapours / aerosols. Provide ventilation.


For emergency responders:

Wear protective clothing as described in Section 8.

6.2 Environmental precautions

Do not discharge into drains, water courses or into the ground. Local authorities should be advised if any exposure to the environment occurs.

6.3 Methods and material for containment and cleaning up

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Absorb with liquid-binding material (eg. sawdust, sand). Be sure to clean completely. Dispose of waste according to the applicable local and national regulation.

6.4 Reference to other sections

See Section 8 for information on personal protective equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:

Use only in a well-ventilated area. Avoid breathing vapor or aerosol. Avoid contact with eyes and skin. When handling, use appropriate personal protective equipment (see Section 8). When using do not eat or drink.

Advice on general occupational hygiene:

Ensure good ventilation/exhaustion at the workplace. When using do not eat, drink or smoke. Wash hand before and after work. Contaminated clothing should be washed before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Store in the original, properly labeled, tightly closed containers in a dry, well-ventilated storage area.

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

2-hydroxyethyl methacrylate


Route of exposure	WORKERS		CONSUMERS	
	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic
Oral	No data available	No data available	No hazard identified	0,83 mg/kg bw/day
Inhalation	No hazard identified	4,9 mg/m ³	No hazard identified	2,9 mg/m ³
Dermal	No hazard identified	1,3 mg/kg bw/day	No data available	0,83 mg/kg bw/day

Methacrylic acid, monoester with propane-1,2-diol

Route of exposure	WORKERS		CONSUMERS	
	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic
Oral	No data available	No data available	No hazard identified	2,5 mg/kg bw/day
Inhalation	No hazard identified	14,7 mg/m ³	No hazard identified	8,8 mg/m ³
Dermal	Low hazard	4,2 mg/kg bw/day	Low hazard	2,5 mg/kg bw/day

Cumene hydroperoxide

Route of exposure	WORKERS		CONSUMERS	
	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic
Oral	No data available	No data available	Exposure based waiving	Exposure based waiving
Inhalation	No data available	6 mg/m ³	Exposure based waiving	Exposure based waiving
Dermal	No data available	No data available	No data available	No data available

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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

2-hydroxyethyl methacrylate

Environmental protection target	PNEC
Freshwater	0.482 mg/L
Freshwater sediments	3,79 mg/kg sediment dw
Marine water	0.482 mg/L
Marine sediments	3,79 mg/kg sediment dw
Food chain	No data available
Microorganisms in sewage treatment	No data available
Soil (agricultural)	0.476 mg/kg soil dw
Air	No hazard

Methacrylic acid, monoester with propane-1,2-diol

Environmental protection target	PNEC
Freshwater	0.904 mg/L
Freshwater sediments	6,28 mg/kg sediment dw
Marine water	0.904 mg/L
Marine sediments	6,28 mg/kg sediment dw
Food chain	0.02 g/kg food
Microorganisms in sewage treatment	No data available
Soil (agricultural)	0.727 mg/kg soil dw
Air	No hazard

Cumene hydroperoxide

Environmental protection target	PNEC
Freshwater	0.003 mg/L
Freshwater sediments	0.023mg/kg sediment dw
Marine water	0 mg/L
Marine sediments	0.002 mg/kg sediment dw
Food chain	No data available
Microorganisms in sewage treatment	No data available
Soil (agricultural)	0.003 mg/kg soil dw
Air	No data available

8.2 Exposure controls

Appropriate engineering controls

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes. Wear approved chemical safety goggles where eye exposure is reasonably probable. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166.

Skin protection:

Hand protection: Use gloves. Gloves must be inspected prior to use. Recommended gloves:

Material: butyl rubber

Minimum layer thickness: >0.7 mm


Break through time: ≥120 min

The selected protective gloves have to satisfy the specifications of Directive 89/686 / EEC and EN 374.

Other: Wear protective clothing. Contaminated clothing should be washed before re-use.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a face respirator. It is recommended to use respiratory equipment with filter.

Environmental exposure controls

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Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour. Do not discharge into drains, water courses or into the ground. Local authorities should be advised if any exposure to the environment occurs.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Green liquid
Odour	Characteristic
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	>100°C
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1- 1,1 g/cm ³
Solubility(ies)	Partially soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2 Other information:

No data available.

SECTION 10: Stability and Reactivity

10.1 Reactivity

Not reactive under normal conditions of storage and use.

10.2 Chemical stability

Stable under recommended storage conditions.


10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to avoid

Avoid release to the environment. Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

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No further relevant information available.

10.6 Hazardous decomposition products

No further relevant information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data available for the mixture

2-hydroxyethyl methacrylate

LD50 (rat, oral)	5 564 mg/kg bw
LD50 (rabbit, skin)	> 5 000 mg/kg bw
LC50 (inhalation)	No data

Methacrylic acid, monoester with propane-1,2-diol

LD50 (rat, oral)	1 1200 mg/kg
LC50 (inhalation)	No data
LD50 (rabbit, skin)	> 3000 mg/kg

cumene hydroperoxide

LD50 (rat, oral)	382 mg/kg bw
LD50 (rabbit, skin)	0.126 mL/kg bw
LC50 (mouse, inhalation)	255 ppm

Skin corrosion/irritation

The mixture was classified as an irritant to the skin.

Serious eye damage/irritation

The mixture was classified as an irritant to the eyes.

Respiratory or skin sensitisation

The mixture was classified, to be likely to cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

The mixture was classified as potentially causing respiratory irritation.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information

No further relevant information available.

SECTION 12: Ecological information

12.1 Toxicity


No data available for the mixture

2-hydroxyethyl methacrylate

Fish (<i>Oryzias latipes</i>)	LC50	> 100 mg/L exposition time: 96h
Aquatic invertebrates (<i>Daphnia magna</i>)	EC50	380 mg/L exposition time: 48h
Algae and bacteria (<i>Pseudokirchneriella subcapitata</i>)	EC50	836 mg/L exposition time: 72h

Methacrylic acid, monoester with propane-1,2-diol

Fish (<i>Leuciscus idus melanotus</i>)	LC50	493 mg/L exposition time: 48h
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Aquatic invertebrates (Daphnia magna)	EC50	>143 mg/L exposition time: 48h
Algae and bacteria (Pseudokirchneriella subcapitata)	EC50	>97.2 mg/L exposition time: 72h
cumene hydroperoxide		
Fish (Oncorhynchus mykiss)	LC50	3.9 mg/L exposition time: 96h
Aquatic invertebrates (Daphnia magna)	EC50	18.84 mg/L exposition time: 48h
Algae and bacteria (Desmodesmus subspicatus)	EC50	3.1 mg/L exposition time: 72h

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Proposed waste code


08 04 09* Waste adhesives and sealants containing organic solvents or other hazardous substances

SECTION 14: Transport Information

	ADR/RID	IMDG	IATA
14.1. UN number	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)	Not applicable	Not applicable	Not applicable
14.4. Packing group	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards	Not applicable	Not applicable	Not applicable
14.6. Special precautions for user	Not applicable	Not applicable	Not applicable
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory information

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

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Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

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

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

2014/955/EU: Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council Text with EEA relevance

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

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

Classification procedure: calculation method

Skin Irrit.2 H315

Skin Sens.1 H317

Eye Irrit.2 H319

STOT SE.3 H335

Aquatic Chronic 3 H412

Relevant H-statements (number and full text)

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

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.


H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Additional Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, Information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Product Safety Data Sheet to their own Product Safety Data Sheet.

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All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary –even for the same product between different countries, reflecting the different compliance requirements.
