

SAFETY DATA SHEET

404P-2 Part A

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: 404P-2 Part A

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

Relevant identified uses of the substance or mixture: Adhesive
Restricted to professional users.

Uses advised against: None known.

1.3. Details of the supplier of the safety data sheet

Company and address: Cyanotec Ltd
Bay 2 Building 62, Third Avenue,
Pensnett Trading Estate,
Kingswinford, West Midlands

E-mail: +44 (0)1384 294753
sales@cyanotec.com

Revision: 24/10/2023

SDS Version: 6.0

Date of previous version: 04/10/2023 (5.0)

1.4. Emergency telephone number

+44 (0)1384 294753 (Office Hours: Monday - Thursday 9:00 to 17:00)

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. ▼Classification of the substance or mixture

Flam. Liq. 2; H225, Highly flammable liquid and vapour.

Acute Tox. 3; H311, Toxic in contact with skin.

Skin Corr. 1A; H314, Causes severe skin burns and eye damage.

Skin Sens. 1; H317, May cause an allergic skin reaction.

Eye Dam. 1; H318, Causes serious eye damage.

STOT SE 3; H335, May cause respiratory irritation.

Repr. 1B; H360, May damage fertility or the unborn child.

Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

2.2. Label elements

▼ **Hazard pictogram(s):**



Signal word:

Danger

▼ **Hazard statement(s):**

Highly flammable liquid and vapour. (H225)
Toxic in contact with skin. (H311)
Causes severe skin burns and eye damage. (H314)
May cause an allergic skin reaction. (H317)
May cause respiratory irritation. (H335)
May damage fertility or the unborn child. (H360)
Toxic to aquatic life with long lasting effects. (H411)

Precautionary statement(s):

General:

-

Prevention:

Obtain special instructions before use. (P201)
Wear eye protection/protective gloves/protective clothing. (P280)

▼ **Response:**

IF exposed or concerned: Get medical advice/attention. (P308+P313)
Take off immediately all contaminated clothing and wash it before reuse. (P361+P364)

Storage:

Store in a well-ventilated place. Keep cool. (P403+P235)

Disposal:

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances:

Tetrahydrofurfuryl methacrylate
methacrylic acid;2-methylpropenoic acid
methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
acrylic acid;prop-2-enoic acid

Additional labelling:

Restricted to professional users.

2.3. Other hazards

Additional warnings:

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Tetrahydrofurfuryl methacrylate	CAS No.: 2455-24-5 EC No.: 219-529-5 UK-REACH: Index No.:	60-80%	Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Chronic 3, H412	
methacrylic acid;2-methylpropenoic acid	CAS No.: 79-41-4 EC No.: 201-204-4 UK-REACH: Index No.: 607-088-00-5	5-10%	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1A, H314 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT SE 3, H335	
methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate	CAS No.: 80-62-6 EC No.: 201-297-1 UK-REACH: Index No.: 607-035-00-6	5-10%	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 (SCL: 10.00 %)	[1]
acrylic acid;prop-2-enoic acid	CAS No.: 79-10-7 EC No.: 201-177-9 UK-REACH: Index No.: 607-061-00-8	3-5%	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Aquatic Chronic 2, H411	[1]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

General information:

In the case of accident: Contact a doctor or casualty department - take the label or this safety data sheet.

Inhalation:

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

▼ *Skin contact:*

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact:

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion:

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns:

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Highly flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

Hazchem Code: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof [electrical/lighting/ventilating] equipment.

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Use non-sparking tools.
 Take action to prevent static discharges.
 It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
 Avoid direct contact with the product.
 Avoid contact during pregnancy and while nursing.
 Smoking, drinking and consumption of food is not allowed in the work area.
 See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material:

Always store in containers of the same material as the original container.

Storage temperature:

No specific requirements

Incompatible materials:

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

methacrylic acid;2-methylpropenoic acid

Long term exposure limit (8 hours) (ppm): 20

Long term exposure limit (8 hours) (mg/m³): 72

Short term exposure limit (15 minutes) (ppm): 40

Short term exposure limit (15 minutes) (mg/m³): 143

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate

Long term exposure limit (8 hours) (ppm): 50

Long term exposure limit (8 hours) (mg/m³): 208

Short term exposure limit (15 minutes) (ppm): 100

Short term exposure limit (15 minutes) (mg/m³): 416

acrylic acid;prop-2-enoic acid

Long term exposure limit (8 hours) (ppm): 10

Long term exposure limit (8 hours) (mg/m³): 29

Short term exposure limit (15 minutes) (ppm): 20 (1 min.)

Short term exposure limit (15 minutes) (mg/m³): 59 (1 min.)

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

DNEL

methacrylic acid;2-methylpropenoic acid

Duration:	Route of exposure:	DNEL:
Long term - Local effects - General population	Dermal	230 µg/cm ²
Long term - Local effects - Workers	Dermal	380 µg/cm ²
Long term - Systemic effects - General population	Dermal	5.35 mg/kg bw/day
Long term - Systemic effects - Workers	Dermal	4.25 mg/kg bw/day
Long term - Local effects - General population	Inhalation	8.8 mg/m ³
Long term - Local effects - Workers	Inhalation	44 mg/m ³
Long term - Systemic effects - General population	Inhalation	11.7 mg/m ³
Long term - Systemic effects - Workers	Inhalation	39.3 mg/m ³
Long term - Systemic effects - General population	Oral	5.35 mg/kg bw/day

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate

Duration:	Route of exposure:	DNEL:
Long term - Local effects - Workers	Dermal	1.5 mg/cm ²
Long term - Systemic effects - Workers	Dermal	13.67 mg/kg bw/day
Short term - Local effects - Workers	Dermal	1.5 mg/cm ²
Long term - Local effects - Workers	Inhalation	208 mg/m ³
Long term - Systemic effects - Workers	Inhalation	348.4 mg/m ³
Short term - Local effects - Workers	Inhalation	416 mg/m ³

PNEC

methacrylic acid;2-methylpropenoic acid

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		820 µg/L
Freshwater sediment		3.09 mg/kg
Intermittent release (freshwater)		450 µg/L
Marine water		82 µg/L
Marine water sediment		309 µg/kg
Sewage treatment plant		100 mg/L
Soil		137 µg/kg

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		940 µg/L
Freshwater sediment		10.2 mg/kg
Intermittent release (freshwater)		690 µg/L
Marine water		94 µg/L
Marine water sediment		1.02 mg/kg

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Sewage treatment plant		10 mg/L
Soil		1.48 mg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures:

Do not recirculate outlet air that contain the substances.

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Ensure that eyewash stations and safety showers are located within easy reach. Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures:

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure:

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally:

Use only UKCA marked protective equipment.

Respiratory Equipment:

Work situation	Type	Class	Colour	Standards	
In case of emergency	Breathing apparatus with a compressor and mask-hood			EN12941, EN12942	

Skin protection:

Work situation	Recommended	Type/Category	Standards	
When there is risk of splash- / intermittent exposure	Dedicated work clothing should be worn.	-	-	

Hand protection:

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
When there is risk of splash- / intermittent exposure	Gloves	-	-	EN374	

Eye protection:

Work situation	Type	Standards	
When there is risk of splash- / intermittent exposure	Safety glasses	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:

Liquid

Colour:

Testing not relevant or not possible due to the nature of the product.

Odour / Odour threshold:

Testing not relevant or not possible due to the nature of the product.

pH:

Testing not relevant or not possible due to the nature of the product.

Density (g/cmS):

Testing not relevant or not possible due to the nature of the product.

Kinematic viscosity:

Testing not relevant or not possible due to the nature of the product.

Particle characteristics:

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C):

Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C):

Does not apply to liquids.

Boiling point (°C):

Testing not relevant or not possible due to the nature of the product.

Vapour pressure:

Testing not relevant or not possible due to the nature of the product.

Relative vapour density:

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C):

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C):

Testing not relevant or not possible due to the nature of the product.

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

<i>Flammability (°C):</i>	The material is ignitable.
<i>Auto-ignition temperature (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Lower and upper explosion limit (% v/v):</i>	Testing not relevant or not possible due to the nature of the product.

Solubility

<i>Solubility in water:</i>	Testing not relevant or not possible due to the nature of the product.
<i>n-octanol/water coefficient:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Solubility in fat (g/L):</i>	Testing not relevant or not possible due to the nature of the product.

9.2. Other information

<i>Oxidizing properties:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Other physical and chemical parameters:</i>	No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock- and heat-sensitive.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid static electricity.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

Thermal decomposition may produce corrosive vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

▼ Acute toxicity

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	29.8 mg/L

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Species:	Rat
Route of exposure:	Inhalation
Test:	NOAEL
Result:	25 ppm

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rat
Route of exposure:	Oral
Test:	NOAEL
Result:	2000 ppm

Toxic in contact with skin.

Skin corrosion/irritation

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rabbit
Result:	Adverse effect observed (Irritating)

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rabbit
Result:	No adverse effect observed (Not irritating)

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Test method:	OECD 429
Species:	Mouse
Result:	Adverse effect observed (sensitising)

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

May damage fertility or the unborn child.

STOT-single exposure

May cause 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.

11.2. Information on other hazards

Long term effects

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders. This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

fertility and dysfunctional menstrual cycle.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Endocrine disrupting properties

This mixture/product does not contain any substances considered to have hormone-disrupting properties in relation to health.

Other information

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate has been classified by IARC as a group 3 carcinogen.

acrylic acid;prop-2-enoic acid has been classified by IARC as a group 3 carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Fish, <i>Oncorhynchus mykiss</i>
Duration:	96 hours
Test:	LC50
Result:	79 mg/L

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Crustacean, <i>Daphnia magna</i>
Duration:	48 hours
Test:	EC50
Result:	69 mg/L

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Test method:	OECD 201
Species:	Algae, <i>Selenastrum capricornutum</i>
Compartment:	Water
Duration:	72 hours
Test:	EC50
Result:	100 mg/L

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Fish, <i>Danio rerio</i>
Duration:	35 days
Test:	NOEC
Result:	9,4 mg/L

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Biodegradable:	Yes
Test method:	OECD 301 C
Result:	94% 14d

12.3. Bioaccumulative potential

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Potential bioaccumulation:	No data available.

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

LogPow: 1.38
BCF: No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 8 - Corrosive

HP 10 - Toxic for reproduction

HP 13 - Sensitising

HP 14 - Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	1133	-	Transport hazard class: 3 Label: EHS 	II	Yes	See below for additional information.
IMDG	1133	-	Transport hazard class: 3 Label: EHS	II	Yes	See below for additional

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
						information.
IATA	1133	-	Transport hazard class: 3 Label: EHS 	II	Yes	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

Hazchem Code: None

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Must not be used by persons suffering from acrylic dermatitis.

Demands for specific education:

No specific requirements.

SEVESO - Categories / dangerous substances:

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Additional information:

Sources:

tier): 500 tonnes

Not applicable.

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.

H226, Flammable liquid and vapour.

H302, Harmful if swallowed.

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.

H332, Harmful if inhaled.

H335, May cause respiratory irritation.

H360, May damage fertility or the unborn child.

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.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the mixture in regard to physical hazards has been based on experimental data.

▼ The safety data sheet is validated by

The Technical Manager

Other

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en

SAFETY DATA SHEET

404P-2 Part B

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.5. Product identifier

Trade name: 404P-2 Part B

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

Relevant identified uses of the substance or mixture: Adhesive
Restricted to professional users.

Uses advised against: None known.

1.7. Details of the supplier of the safety data sheet

Company and address: **Cyanotec Ltd**
Bay 2 Building 62, Third Avenue,
Pensnett Trading Estate,
Kingswinford, West Midlands
+44 (0)1384 294753
sales@cyanotec.com
E-mail:
Revision: 26/10/2023
SDS Version: 6.0
Date of previous version: 04/10/2023 (5.0)

1.8. Emergency telephone number

+44 (0)1384 294753 (Office Hours: Monday - Thursday 9:00 to 17:00)

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.4. ▼ Classification of the substance or mixture

Flam. Liq. 2; H225, Highly flammable liquid and vapour.
Skin Corr. 1A; H314, Causes severe skin burns and eye damage.
Skin Sens. 1; H317, May cause an allergic skin reaction.
Eye Dam. 1; H318, Causes serious eye damage.
STOT SE 3; H335, May cause respiratory irritation.
Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.5. Label elements

Hazard pictogram(s):



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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Signal word:	Danger
▼ Hazard statement(s):	Highly flammable liquid and vapour. (H225) Causes severe skin burns and eye damage. (H314) May cause an allergic skin reaction. (H317) May cause respiratory irritation. (H335) Harmful to aquatic life with long lasting effects. (H412)
Precautionary statement(s):	
General:	-
Prevention:	Do not breathe vapour/mist. (P260) Wear eye protection/protective gloves/protective clothing. (P280)
Response:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Storage:	Store in a well-ventilated place. Keep cool. (P403+P235)
Disposal:	Dispose of contents/container in accordance with local regulation (P501)
Hazardous substances:	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate Boron, triethyl(1,3-propanediamine-.kappa.N)-, (T-4)- Benzyl methacrylate Trimethylenediamine 2,6-di-tert-butyl- α -dimethylamino-p-cresol

2.6. Other hazards

Additional warnings:	This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.3. Substances

Not applicable. This product is a mixture.

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

3.4. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate	CAS No.: 80-62-6 EC No.: 201-297-1 UK-REACH: Index No.: 607-035-00-6	60-80%	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 (SCL: 10.00 %)	[1]
Boron, triethyl(1,3-propanediamine- κ .N)-, (T-4)-	CAS No.: 148861-07-8 EC No.: 604-654-3 UK-REACH: Index No.:	5-10%	Acute Tox. 4, H312 Skin Corr. 1A, H314	
Benzyl methacrylate	CAS No.: 2495-37-6 EC No.: 219-674-4 UK-REACH: Index No.:	1-3%	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319 STOT SE 3, H335	
Trimethylenediamine	CAS No.: 109-76-2 EC No.: 203-702-7 UK-REACH: Index No.:	<1%	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 2, H310 Skin Corr. 1B, H314 Skin Sens. 1B, H317 Eye Dam. 1, H318 Resp. Sens. 1B, H334	
2,6-di-tert-butyl- α -dimethylamino-p-cresol	CAS No.: 88-27-7 EC No.: 201-816-1 UK-REACH: Index No.:	<1%	Acute Tox. 4, H302 Skin Sens. 1B, H317 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

SECTION 4: FIRST AID MEASURES

4.4. Description of first aid measures

General information:

In the case of accident: Contact a doctor or casualty department - take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh

Skin contact:

air and stay with him/her.

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact:

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion:

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns:

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Tissue-damaging effects: This product contains substances with skin corrosive properties.

Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.4. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.5. Special hazards arising from the substance or mixture

Highly flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.6. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

Hazchem Code: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.5. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

Contaminated areas may be slippery.

6.6. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.7. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.8. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.4. Precautions for safe handling

Ground and bond container and receiving equipment.
Use explosion-proof [electrical/lighting/ventilating] equipment.
Use non-sparking tools.
Take action to prevent static discharges.
It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
The product should be tested for peroxide formation or discarded after 6 months.
Avoid direct contact with the product.
Peroxide formation may be present anywhere in the container, including the sides, bottom, exterior and threaded cap. Peroxide formation in ppm concentrations may not be visually observable and must be identified through the use of appropriate testing procedures. If any of the following conditions exist, the material may be explosively unstable and will require stabilization prior to use:

- Material appears to be degraded and or contaminated.
- Material appears to be discolored.
- Deterioration or distortion of storage container.
- Thermal shock (sunlight).
- Age of material exceeds recommended storage time.

Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.5. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

<i>Recommended storage material:</i>	Always store in containers of the same material as the original container.
<i>Storage temperature:</i>	No specific requirements
<i>Incompatible materials:</i>	Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.6. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.3. Control parameters

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Long term exposure limit (8 hours) (ppm): 50
Long term exposure limit (8 hours) (mg/m³): 208
Short term exposure limit (15 minutes) (ppm): 100
Short term exposure limit (15 minutes) (mg/m³): 416

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate

Duration:	Route of exposure:	DNEL:
Long term - Local effects - Workers	Dermal	1.5 mg/cm ²
Long term - Systemic effects - Workers	Dermal	13.67 mg/kg bw/day
Short term - Local effects - Workers	Dermal	1.5 mg/cm ²
Long term - Local effects - Workers	Inhalation	208 mg/m ³
Long term - Systemic effects - Workers	Inhalation	348.4 mg/m ³
Short term - Local effects - Workers	Inhalation	416 mg/m ³

PNEC

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		940 µg/L
Freshwater sediment		10.2 mg/kg
Intermittent release (freshwater)		690 µg/L
Marine water		94 µg/L
Marine water sediment		1.02 mg/kg
Sewage treatment plant		10 mg/L
Soil		1.48 mg/kg

8.4. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures:

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Ensure that eyewash stations and safety showers are located within easy reach. Apply standard precautions during use of the

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Hygiene measures:

product. Avoid inhalation of vapours.

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure:

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally:

Use only UKCA marked protective equipment.

Respiratory Equipment:

Work situation	Type	Class	Colour	Standards	
In case of emergency	Breathing apparatus with a compressor and mask-hood			EN12941, EN12942	

Skin protection:

Work situation	Recommended	Type/Category	Standards	
When there is risk of splash- / intermittent exposure	Dedicated work clothing should be worn.	-	-	

Hand protection:

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
When there is risk of splash- / intermittent exposure	Gloves	-	-	EN374	

Eye protection:

Work situation	Type	Standards	
When there is risk of splash- / intermittent exposure	Safety glasses	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.3. Information on basic physical and chemical properties

Physical state:

Liquid

Colour:

Testing not relevant or not possible due to the nature of the product.

Odour / Odour threshold:

Testing not relevant or not possible due to the nature of the product.

pH:

Testing not relevant or not possible due to the nature of the product.

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

<i>Density (g/cmS):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Kinematic viscosity:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Particle characteristics:</i>	Does not apply to liquids.
Phase changes	
<i>Melting point/Freezing point (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Softening point/range (waxes and pastes) (°C):</i>	Does not apply to liquids.
<i>Boiling point (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Vapour pressure:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Relative vapour density:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Decomposition temperature (°C):</i>	Testing not relevant or not possible due to the nature of the product.
Data on fire and explosion hazards	
<i>Flash point (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Flammability (°C):</i>	The material is ignitable.
<i>Auto-ignition temperature (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Lower and upper explosion limit (% v/v):</i>	Testing not relevant or not possible due to the nature of the product.
Solubility	
<i>Solubility in water:</i>	Testing not relevant or not possible due to the nature of the product.
<i>n-octanol/water coefficient:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Solubility in fat (g/L):</i>	Testing not relevant or not possible due to the nature of the product.
9.4. Other information	
<i>Oxidizing properties:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Other physical and chemical parameters:</i>	No data available.

SECTION 10: STABILITY AND REACTIVITY

10.7. Reactivity

Highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock- and heat-sensitive.

10.8. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.9. Possibility of hazardous reactions

None known.

10.10. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.11. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.12. Hazardous decomposition products

Thermal decomposition may produce corrosive vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.3. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law**Acute toxicity**

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	29.8 mg/L

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rat
Route of exposure:	Inhalation
Test:	NOAEL
Result:	25 ppm

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rat
Route of exposure:	Oral
Test:	NOAEL
Result:	2000 ppm

Skin corrosion/irritation

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rabbit
Result:	Adverse effect observed (Irritating)

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Rabbit
Result:	No adverse effect observed (Not irritating)

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Test method:	OECD 429

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Species:	Mouse
Result:	Adverse effect observed (sensitising)

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

May cause 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.

11.4. Information on other hazards

Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances considered to have hormone-disrupting properties in relation to health.

Other information

methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate has been classified by IARC as a group 3 carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.8. Toxicity

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Fish, <i>Oncorhynchus mykiss</i>
Duration:	96 hours
Test:	LC50
Result:	79 mg/L

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Crustacean, <i>Daphnia magna</i>
Duration:	48 hours
Test:	EC50
Result:	69 mg/L

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Test method:	OECD 201
Species:	Algae, <i>Selenastrum capricornutum</i>
Compartment:	Water
Duration:	72 hours
Test:	EC50
Result:	100 mg/L

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Species:	Fish, <i>Danio rerio</i>
Duration:	35 days
Test:	NOEC
Result:	9,4 mg/L

Harmful to aquatic life with long lasting effects.

12.9. Persistence and degradability

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Biodegradable:	Yes
Test method:	OECD 301 C
Result:	94% 14d

12.10. Bioaccumulative potential

Product/substance	methyl methacrylate;methyl 2-methylprop-2-enoate;methyl 2-methylpropenoate
Potential bioaccumulation:	No data available.
LogPow:	1.38
BCF:	No data available.

12.11. Mobility in soil

No data available.

12.12. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.13. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.14. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 8 - Corrosive

HP 13 - Sensitising

HP 14 - Ecotoxic

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	1133	-	Transport hazard class: 3 Label: EHS	II	No	See below for additional information.
IMDG	1133	-	Transport hazard class: 3 Label: EHS	II	No	See below for additional information.
IATA	1133	-	Transport hazard class: 3 Label: EHS	II	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

Hazchem Code: None

14.8. Special precautions for user

Not applicable.

14.9. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:

Restricted to professional users.
People under the age of 18 shall not be exposed to this product.

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According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Demands for specific education:

SEVESO - Categories / dangerous substances:

Additional information:

Sources:

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.
Must not be used by persons suffering from acrylic dermatitis.

No specific requirements.

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

Not applicable.

The Management of Health and Safety at Work Regulations 1999.
The Health and Safety at Work etc. Act 1974
Regulations 2013.
Control of Major Accident Hazards (COMAH) Regulations 2015.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.4. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.

H226, Flammable liquid and vapour.

H302, Harmful if swallowed.

H310, Fatal 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.

H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335, May cause respiratory irritation.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the mixture in regard to physical hazards has been based on experimental data.

▼ The safety data sheet is validated by

The Technical Manager

404P-2 Part B

According to REACH Regulation (EC) No 1907/2006, as retained and amended SI 2019/758 and SI 2020/1577

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

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