



SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

1.1 Product Identifier

Product number and name **83232-A PRATLEY SP020 PART A, 50ml pack**
Product type Adhesive

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

Relevant identified uses Consumer use
Uses advised against No specific uses advised against.
 Avoid eye contact, inhalation of vapours or ingestion.

1.3 Details of Supplier of Safety Data Sheet

Manufactured by	Pratley Polymers Manufacturing (Proprietary) Ltd 14 Jackson Street, Factoria, Krugersdorp, 1745 South Africa Tel: +27-11-955-2190 Fax: +27-11-955-3918 www.pratleyadhesives.com
Supplied in South Africa by	Pratley (Proprietary) Ltd 14 Jackson Street, Factoria, Krugersdorp, 1745 South Africa Tel: +27-11-955-2190 Fax: +27-11-955-3918 sales@pratley.com www.pratleyadhesives.com
Supplied outside South Africa by	Pratley Exporting (Proprietary) Ltd 14 Jackson Street, Factoria, Krugersdorp, 1745 South Africa Tel: +27-11-955-2190 Fax: +27-11-955-3918 exports@pratley.com www.pratleyadhesives.com

1.4 Emergency Telephone Number

South Africa +27-11-955-2190 during office hours
 10117 All emergencies
 +27-21-689-5227 Poisons Information Centre
Europe 112 All emergencies

For detailed poison information, the national poison centre, if available, should be contacted.

United Kingdom	999 All emergencies 111 (NHS, England, NHS 24, Scotland or NHS Direct, Wales), 0808 808 8000 (Lifeline, N. Ireland) 01 809 2166 (National Poison Information Centre, Republic of Ireland)
Australia	000 All emergencies 13 11 26 NSW Poison Information Centre
New Zealand	111 All emergencies 0800 764 766 National Poisons Centre (poisons@otago.ac.nz)
Americas	911 All emergencies 1-800-222-1222 Poisons Help (PoisonHelp.org)

SECTION 2 – HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification

Class	Category	Hazard Code and Statement	
Flammable	2	H225	Highly flammable liquid and vapour.
Organic Peroxide	E	H242	Heating may cause fire.
Acute Toxicity, oral	5	H303	May be harmful if swallowed.
Skin Corrosion/Irritation	1	H314	Causes severe skin burns and eye damage.
Eye Corrosion/Irritation	1	H318	Causes serious eye damage.
Skin Sensitizer	1	H317	May cause an allergic skin reaction.
Carcinogen	2	H351	Suspected of causing cancer.
STOT-SE	3	H335	May cause respiratory irritation.
STOT-RE	2	H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Toxicity - Acute	2	H401	Toxic to aquatic life.
Aquatic Toxicity - Chronic	3	H412	Harmful to aquatic life with long lasting effects.

2.1.2 Additional Information

EUH205 Contains epoxy constituents. May produce an allergic reaction.

EUH208 Contains methyl methacrylate, glycol methacrylate and quinol. May produce an allergic reaction.

2.2 Label Elements

Hazard Pictogram(s),
Signal Word and
Ingredients



DANGER

**Methyl methacrylate
Glycol methacrylate
Epoxy resin
Cumene hydroperoxide
BHT
Quinol**

The technical name has been replaced on the label by a name / identification that is easier for a consumer to identify. See section 16 for a comparison of the technical and alternative names used.

Hazard Statements

H225 **Highly flammable liquid and vapour.**
H242 **Heating may cause fire.**

	H303	May be harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H401	Toxic to aquatic life.
	H412	Harmful to aquatic life with long lasting effects.
Obligatory Statements	EUH205	Contains epoxy constituents. May produce an allergic reaction.
	EUH208	Contains methyl methacrylate, glycol methacrylate and quinol. May produce an allergic reaction.
Precautionary Statements	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P103	Read label before use.
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P233	Keep container tightly closed.
	P234	Keep in original packaging.
	P235	Keep cool.
	P240	Ground and bond container and receiving equipment.
	P241	Use explosion proof [electrical/ventilating/lighting/...] equipment
	P242	Use non-sparking tools
	P243	Take action to prevent static discharge.
	P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
	P261	Avoid breathing vapours.
	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.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/eye protection.
	P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308+P313	If exposed or concerned: get medical advice/attention.
	P310	Immediately call a POISON CENTER/doctor.

- P312 Call a POISON CENTER/doctor/ ... if you feel unwell.
 P314 Get medical advice/attention if you feel unwell.
 P321 Specific treatment (see..on this label)
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash before reuse.
 P363 Wash contaminated clothing before reuse.
 P370+P378 In case of fire: Use... to extinguish.
 P403 Store in a well-ventilated place.
 P405 Store locked up.
 P410 Protect from sunlight.
 P411 Store at temperatures not exceeding ...°C /°F.
 P420 Store separately.
 P501 **Dispose of contents/container in accordance with local regulations.**

Only the hazard statements and Precautionary statements in bold text have been included on the label in accordance with the allowed omissions set out in the ECHA Guidance on Labelling and Packaging.

2.3 Other Hazards

Contains substance(s) under assessment as an endocrine disruptor.

Contains substance(s) suspected to be carcinogenic and/or mutagenic.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous Ingredients	% [weight]	CAS No. EC No. Index No.	SCL, M-Factors, ATE	Classification	H / EUH Code(s)
methyl methacrylate	45 - 65	80-62-6 201-297-1 607-035-00-6		Flammable liquid – 2 Skin irritation – 2 Skin sensitizer – 1 STOT-SE – 3 Obligatory	H225 Highly flammable liquid and vapour H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. EUH208 Contains methyl methacrylate. May produce an allergic reaction.
2-hydroxyethyl methacrylate	15 - 25	868-77-9 212-782-2 607-124-00-X		Skin irritation – 2 Eye irritation – 2 Skin sensitizer – 1 Obligatory	H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. EUH208 Contains glycol methacrylate. May produce an allergic reaction.
Reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin, MW ≤ 700	5 - 8	25068-38-6 500-033-5 603-074-00-8	Skin Irritation: H315: C ≥ 5% Eye Irritation: H319: C ≥ 5%	Skin irritation - 2 Eye irritation – 2 Skin sensitizer – 1 Aquatic Chronic – 2 Obligatory	H315 Causes skin irritation H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.

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					EUH205 Contains epoxy constituents. May produce an allergic reaction.
cumene hydroperoxide	5 - 6	80-15-9 201-254-7 617-002-00-8	Eye Dam. 1; H318: 3 % ≤ C < 10 % Eye Irrit. 2; H319: 1 % ≤ C < 3 % STOT SE 3; H335: C < 10 % Skin Corr. 1B; H314: C ≥ 10 % Skin Irrit. 2; H315: 3 % ≤ C < 10 %	Organic peroxide – E Acute Toxicity, oral – 4 Acute Toxicity, dermal - 4 Acute Toxicity, inhalation – 3 Skin Corrosion – 1B Eye Corrosion – 1 STOT-RE – 2 (inhalation) Aquatic Toxicity, chronic – 2	H242 Heating may cause a fire. H302 Harmful if swallowed. H312 Harmful in contact with skin. H331 Toxic if inhaled. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.
2,6-di-tert-butyl-p-cresol	< 0.5	128-37-0 204-881-4 -	M(Chronic) = 1	Aquatic Toxicity, chronic – 1	H410 Very toxic to aquatic life with long lasting effects.
hydroquinone	< 0.3	123-31-9 204-617-8 604-05-00-4	M=10	Acute Toxicity, oral – 4 Eye Corrosion – 1 Skin sensitizer – 1 Mutagen – 2 Carcinogen – 2 Aquatic Toxicity, acute – 1	H302 Harmful if swallowed. H318 Causes serious eye damage. H317 May cause an allergic reaction. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer. H400 Very toxic to aquatic life.

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures

SKIN Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

EYE Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

INHALATION Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt, or waistband.

INGESTION Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in the recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt, or waistband.

4.2 Most important symptoms and effects, both acute and delayed

SKIN Irritation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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EYE	Corrosive effects.
INHALATION	Irritation or corrosive effects. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
INGESTION	Irritation or corrosive effects.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Extinguishing Media

SUITABLE Water fog, foam, extinguishing powder, or carbon dioxide.

NOT SUITABLE Do not use water jet.

5.2 Special Hazards arising from the Substance or Mixture

HAZARDS FROM THE SUBSTANCE / MIXTURE Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Reignition may occur.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS Oxides of carbon.

5.3 Advice for Firefighters

SPECIAL PRECAUTIONS FOR FIREFIGHTERS Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Reignition may occur.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not walk through spilled material. Avoid breathing vapour or mist. Provide adequate ventilation.

6.1.1 For non-emergency personnel

Wear appropriate personal protective equipment. Collect and dispose of as soon as possible.

SKIN General purpose non-permeable gloves and overalls.

FACE / EYES Safety goggles.

CLOTHING No special requirements. Wash clothing thoroughly if contaminated.

VENTILATION If ventilation is poor use a self-contained breathing apparatus suitable for organic vapours.

6.1.2 For emergency personnel

Wear appropriate personal protective equipment. Collect and dispose of as soon as possible.

SKIN General purpose non-permeable gloves and overalls.

FACE / EYES Safety goggles.

CLOTHING No special requirements. Wash clothing thoroughly if contaminated.

VENTILATION If ventilation is poor use a self-contained breathing apparatus suitable for organic vapours.

6.2 Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, air). Very toxic to the environment.

6.3 Method and material for containment and cleaning up

6.3.1 Containment procedure

Absorb with inert material and collect for disposal. If released into water, immediate collection by a suitably sized scoop is needed.

6.3.2 Clean-up procedure

Small amounts should be cured by mixing parts A and B together and then disposed of in accordance with local regulations.

Large amounts would need to be incinerated in accordance with local regulations.

6.3.3 Additional Information

See SECTION 13 for disposal considerations.

6.4 Reference to other sections

See SECTION 13 for disposal considerations.

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for Safe handling

7.1.1 Recommendations for safe handling and storage

Do not eat, drink, or smoke where this material is stored. Avoid release to the environment. Keep in the original container and keep tightly closed when not in use. Empty containers retain product residue and may be hazardous. Do not reuse containers.

7.1.2 Advice on general occupational hygiene

Put on appropriate personal protective equipment (see SECTION 8). Do not eat, drink, or smoke when working with this material. Wash hands and face before eating, drinking, or smoking. Persons with a history of skin sensitization problems should not use this product. Do not get in eyes. Avoid skin contact as much as possible. Do not ingest. Avoid breathing vapours.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in the original container protected from sources of ignition or direct sunlight in a dry, cool (10-30°C) and well-ventilated area, away from incompatible materials, food and drink. Keep container tightly closed and sealed until ready to use. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Incompatible Materials: strong oxidising agents, strong reducing agents, bases, and powdered metals, especially aluminium and zinc.

Packaging Material: Use original container.

7.3 Specific end use(s)

Not applicable.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control Parameters

The DNEL (Derived No-Effect Level) for humans by inhalation, ingestion and dermal routes of exposure and the PNEC (Predicted No-Effect Concentration) for environmental exposure given below are not intended to be directly used for setting workplace or general population exposure limits. Due to differences in calculation methodology the DNEL will tend to be lower (sometimes significantly) than any corresponding health based-OEL for that chemical substance. Further,

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although DNELs (and PNEC's) are an indication of setting risk measures, it should be recognized that these limits do not have the same regulatory application as officially endorsed government OELs.

DNEL

Ingredient (CAS No.)	Route of exposure		Exposure Limit	
			Workers	Consumers
methyl methacrylate (80-62-6)	Oral	ST, Local	Not applicable	No data available
		ST, systemic	Not applicable	No hazard identified
		LT, Local	Not applicable	No data available
		LT, systemic	Not applicable	DNEL: 8.2 mg/kg bw/day (repeated dose)
	Dermal	ST, local	DNEL: 1.5 mg/cm ² (sensitization)	DNEL: 1.5 mg/cm ² (sensitization)
		ST, systemic	No hazard identified.	No hazard identified.
		LT, Local	DNEL: 1.5 mg/cm ² (sensitization)	DNEL: 1.5 mg/cm ² (sensitization)
		LT, systemic	DNEL: 13.67 mg/kg bw/day (repeated dose)	DNEL: 8.2 mg/kg bw/day (repeated dose)
	Inhalation	ST, Local	DNEL: 416 mg/m ³ (repeated dose)	DNEL: 208 mg/m ³ (repeated dose)
		ST, systemic	No hazard identified.	No hazard identified.
		LT, Local	DNEL: 208 mg/m ³ (repeated dose)	DNEL: 104 mg/m ³ (repeated dose)
		LT, systemic	DNEL: 348.4 mg/m ³ (repeated dose)	DNEL: 74.3 mg/m ³ (repeated dose)
2-hydroxyethyl methacrylate (868-77-9)	Oral	ST, Local	Not applicable	No hazard identified
		ST, systemic	Not applicable	No hazard identified
		LT, Local	Not applicable	No hazard identified
		LT, systemic	Not applicable	DNEL: 1.45 mg/m ³ (repeated dose)
	Dermal	ST, Local	No hazard identified	No hazard identified
		ST, systemic	No hazard identified	No hazard identified
		LT, Local	No hazard identified	No hazard identified
		LT, systemic	DNEL: 1.39 mg/kg bw/day (repeated dose)	DNEL: 830 µg/m ³ (repeated dose)
	Inhalation	ST, Local	No hazard identified	No hazard identified
		ST, systemic	No hazard identified	No hazard identified
		LT, Local	No hazard identified	No hazard identified
		LT, systemic	DNEL: 4.9 mg/m ³ (repeated dose)	DNEL: 1.45 mg/m ³ (repeated dose)
Reaction product: bisphenol-A- (epichlorhydrin) and epoxy resin, MW ≤ 700 (25068-38-6)	Oral	ST, systemic	not applicable	DNEL: 0.75 mg/kg bw/day
		LT, systemic	not applicable	DNEL: 0.75 mg/kg bw/day
	Dermal	ST, systemic	DNEL: 8.3 mg/kg bw/day	DNEL: 3.6 mg/kg bw/day
		LT, systemic	DNEL: 8.3 mg/kg bw/day	DNEL: 3.6 mg/kg bw/day
	Inhalation	ST, systemic	DNEL: 12.3 mg/m ³	DNEL: 0.75 mg/m ³
		LT, systemic	DNEL: 12.3 mg/m ³	DNEL: 0.75 mg/m ³
cumene hydroperoxide (80-15-9)	Oral		Not applicable.	No data available.
	Dermal		No data available.	No data available.

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	Inhalation	LT, systemic	DNEL: 6 mg/m ³	No data available.
2,6-di-tert-butyl-p-cresol (128-37-0)	Oral	ST, Local	Not applicable	No data available
		ST, systemic	Not applicable	No hazard identified
		LT, Local	Not applicable	No data available
		LT, systemic	Not applicable	DNEL: 250 µg/kg bw/day (repeated dose)
	Dermal	ST, Local	No hazard identified.	No hazard identified.
		ST, systemic	No hazard identified.	No hazard identified.
		LT, Local	No hazard identified.	No hazard identified.
		LT, systemic	DNEL: 500 µg/kg bw/day (repeated dose)	DNEL: 250 µg/kg bw/day (repeated dose)
	Inhalation	ST, Local	No data available	No data available
		ST, systemic	No data available	No data available
		LT, Local	No data available	No data available
		LT, systemic	DNEL: 1.76 mg/kg bw/day (repeated dose)	DNEL: 435 µg/kg bw/day (repeated dose)
Hydroquinone (123-31-9)	Oral	ST, Local	Not applicable	No data available
		ST, systemic	Not applicable	Low hazard (no threshold derived)
		LT, Local	Not applicable	No data available
		LT, systemic	Not applicable	DNEL: 600 µg/kg bw/day (carcinogenicity)
	Dermal	ST, Local	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)
		ST, systemic	No hazard identified	No hazard identified
		LT, Local	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)
		LT, systemic	DNEL: 3.33 mg/kg bw/day (carcinogenicity)	DNEL: 1.66 mg/kg bw/day (carcinogenicity)
	Inhalation	ST, Local	No data available	No data available
		ST, systemic	No hazard identified	No hazard identified
		LT, Local	No data available	No data available
		LT, systemic	DNEL: 12.3 mg/m ³ (carcinogenicity)	DNEL: 1.05 mg/m ³ (carcinogenicity)

PNEC

Fresh water	Freshwater sediments	Marine water	Marine water sediments	Food chain	Sewage treatment	Soil (agricultural)	Air	Intermittent releases
methyl methacrylate (80-62-6)								
940 µg/L	10.2 mg/kg sediment dw	94 µg/L	102 µg/kg sediment dw	No bio-accumulation potential	10 mg/L	1.48 mg/kg soil dw	No hazard identified	940 µg/L
2-hydroxyethyl methacrylate (868-77-9)								
482 µg/L	3.79 mg/kg dw	48.2 µg/L	3.79 mg/kg dw	No bio-accumulation potential	10 mg/L	476 µg/kg soil dw	No hazard identified	1 mg/L

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Reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin, MW ≤ 700 (25068-38-6)								
3 µg/l	0.5 mg/kg dwt	0.3 µg/l	0.5 mg/kg dwt	Not available / No limit set	10 mg/l	Not available / No limit set	Not available / No limit set	0.013 mg/l
cumene hydroperoxide (80-15-9)								
3.1 µg/L	23 µg/kg dw	310 ng/L	2.3 µg/kg dw	No potential for bio-accumulation	350 µg/L	2.9 µg/kg dw	No hazard identified	31 µg/L
2,6-di-tert-butyl-p-cresol (128-37-0)								
199 ng/L	458.19 µg/kg dw	19.9 ng/L	45.82 µg/kg dw	16.67 mg/kg food	17 µg/L	53.9 µg/kg soil dw	No hazard identified	1.99 µg/L
Hydroquinone (123-31-9)								
570 ng/L	4.9 µg/kg sediment dw	57 ng/L	490 ng/kg sediment dw	No bio-accumulation potential	710 µg/L	640 ng/kg soil dw	No hazard identified	1.34 µg/L

8.2 Exposure Controls

8.2.1 Appropriate engineering controls

None required. Use in a well-ventilated area. If ventilation is poor use a self-contained breathing apparatus.

8.2.2 Personal Protection

Skin General purpose non-permeable gloves and overalls.

Face / Eye Avoid eye contact. Do not touch or rub eyes after contact with product. Wash hands thoroughly with soap and water first.

Inhalation This is unlikely due to the nature of the material. Use outdoors or in a well-ventilated area.

Ingestion Do not eat, drink, or smoke while working with this product. Wash hands thoroughly with soap and water after using this product. Keep away from children.

Thermal None required when used as instructed.

Other Always wash hands with soap and water after use.

8.2.3 Environmental Protection

Avoid release to the environment. Contain and dispose of in accordance with local regulations.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 information on physical and chemical properties

Physical State	Viscous (thick) liquid
Colour	Light brown
Odour	Sweet, pungent
Melting point / Freezing point (°C)	Technically impossible to determine for mixtures. -48°C for methyl methacrylate portion.
Boiling point, initial and range (°C)	100.36°C for methyl methacrylate portion.
Flammability	Highly flammable.
Explosion / Flammability limits	No data available.
Flash point (°C), closed cup	10°C for methyl methacrylate portion.
Auto-ignition temperature (°C)	435°C for methyl methacrylate portion.
Decomposition temperature (°C)	No data available. SADT 70°C for cumene hydroperoxide portion.
pH	No data available.

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Kinematic Viscosity (at 23°C)	3000 cSt.
Solubility	15.3 g/L @ 20 °C for methyl methacrylate portion.
Partition co-efficient : n-octanol / water	Log Kow 1.38 @20°C for methyl methacrylate portion.
Vapour pressure	37 hPa @ 20°C for methyl methacrylate portion
Density and/or Relative density (at 23°C)	1.0 g/cm ³
Relative Vapour density	No data available.
Particle characteristics	Not applicable.

9.2 Other information

9.2.1 Information with regards to physical Hazard Classes

Exothermic reaction when mixed with Part B. Possible fire hazard.

9.2.2 Other Safety Characteristics

Contains substance(s) under assessment as an endocrine disruptor.

Contains substance(s) suspected to be carcinogenic and/or mutagenic.

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity

Reacts with strong oxidising agents, strong reducing agents, bases, and powdered metals, especially aluminium and zinc.

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

Hazardous reactions may occur under certain conditions of storage or use.

10.4 Conditions to Avoid

Exposure to elevated temperatures can cause material to decompose. Avoid open flames, welding arcs, or other high temperature sources.

10.5 Incompatible Materials

Strong oxidizing agents and acids, strong reducing agents, bases, and powdered metals, especially aluminium and zinc.

10.6 Hazardous Decomposition Products

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

SECTION 11 – TOXOLOGICAL INFORMATION

11.1 Information on Hazard Classes

Ingredient (CAS No.)	Toxicological effect	Findings
methyl methacrylate (80-62-6)	Acute Toxicity - oral	No adverse effect observed LD50, rat 7900 mg/kg bw
	Acute Toxicity - dermal	No adverse effect observed LD50, rabbit 5000 mg/kg bw

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	Acute Toxicity - inhalation	No adverse effect observed LC50 (4h), rat 29.8 mg/L air
	Skin Corrosion/Irritation	Adverse effect observed (irritating).
	Serious Eye Damage/Irritation	No adverse effect observed (not irritating)
	Skin Sensitizer	Adverse effect observed (sensitising)
	Respiratory Sensitizer	No adverse effect observed (not sensitising)
	Germ Cell Mutagenicity	InVitro: No adverse effect observed (negative) InVivo: No adverse effect observed (negative)
	Carcinogenicity	ORAL: No adverse effect observed NOAEL 90.3 mg/kg bw/day (chronic, rat) INHALATION: No adverse effect observed NOAEC 2050 mg/m ³ (chronic, rat)
	Reproductive Toxicity	No applicable toxicity data. No known significant effects or critical hazards.
	Developmental / Teratogenic Toxicity	ORAL: No adverse effect observed NOAEL 450 mg/kg bw/day (subacute, rabbit) INHALATION: No adverse effect observed NOAEC 8 300 mg/m ³ (subacute, rat)
	STOT - Single Exposure	No applicable toxicity data. No known significant effects or critical hazards.
	STOT - Repeated Exposure	ORAL: No adverse effect observed NOAEL 124 mg/kg bw/day (chronic, rat) INHALATION, SYSTEMIC: No adverse effect observed NOAEC 2 080 mg/m ³ (chronic, rat) INHALATION, LOCAL: Adverse effect observed NOAEC 104 mg/m ³ (chronic, rat)
	Aspiration Hazard	No applicable toxicity data. No known significant effects or critical hazards.
2-hydroxyethyl methacrylate (868-77-9)	Acute Toxicity - oral	No adverse effect observed LD50 5 000 mg/kg bw
	Acute Toxicity - dermal	No adverse effect observed LD50 5 000 mg/kg bw
	Acute Toxicity - inhalation	No applicable toxicity data. No known significant effects or critical hazards.
	Skin Corrosion/Irritation	No adverse effect observed (not irritating)
	Serious Eye Damage/Irritation	Adverse effect observed (irritating)
	Skin Sensitizer	Adverse effect observed (sensitising)
	Respiratory Sensitizer	No adverse effect observed (not sensitising)
	Germ Cell Mutagenicity	InVitro: Adverse effect observed (positive) InVivo: No adverse effect observed (negative)
	Carcinogenicity	No applicable toxicity data. No known significant effects or critical hazards.
	Reproductive Toxicity	No adverse effect observed NOAEL, oral 1 000 mg/kg bw/day (subacute, rat)
	Developmental / Teratogenic Toxicity	No applicable toxicity data. No known significant effects or critical hazards.
	STOT - Single Exposure	No applicable toxicity data. No known significant effects or critical hazards.
	STOT - Repeated Exposure	Adverse effect observed NOAEL 100 mg/kg bw/day (subacute, rat)
	Aspiration Hazard	No applicable toxicity data. No known significant effects or critical hazards.
Reaction product: bisphenol-A-(epichlorhydrin) and	Acute Toxicity - oral	LD50: Rat 30,000 mg/kg; Not acutely toxic in multiple mouse and rat studies. NAOEL LD50 2 000 mg/kg bw

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epoxy resin, MW ≤ 700 (25068-38-6)	Acute Toxicity - dermal	In a rat OECD 402 study the dermal LD ₅₀ was > 2000 mg/kg. In multiple rabbit acute dermal studies, the LD ₅₀ was > 2000 mg/kg. One rabbit study reported an LD ₅₀ value of 23 grams/kg
	Acute Toxicity - inhalation	No applicable toxicity data. No known significant effects or critical hazards. Due to the very low vapor pressure, saturated atmosphere = 0.008 ppb, meaningful acute inhalation studies could not be conducted.
	Skin Corrosion/Irritation	Not a skin irritant. In an OECD 404 study conducted on the rabbit with a 4 hr occlusive exposure scores for erythema and oedema were minimal In other studies, conducted with the rabbit a 4 hr occlusive exposure was used. Maximum erythema and oedema scores observed under these extreme conditions were 1.5-2 and 1-1.5 respectively.
	Serious Eye Damage/Irritation	Not an eye irritant The results of an OECD 405 GLP study conducted in 2007 reported a mean maximum irritation score of 1.7. The results of multiple older non-guideline studies support this finding.
	Skin Sensitizer	Skin sensitizer. In an OECD 429 mouse LLNA study the estimated EC ₃ was a concentration of 5.7%. In an OECD 406 guinea pig Maximization study BADGE induced positive dermal reaction in 100% of the test animals at a 50% concentration challenge dose. Also positive for skin sensitization in an OECD 406 guinea pig Buehler method study.
	Respiratory Sensitizer	No applicable toxicity data. No known significant effects or critical hazards. Due to the very low vapor pressure, saturated atmosphere = 0.008 ppb, meaningful studies could not be conducted.
	Germ Cell Mutagenicity	Induced gene-mutation in Ames/Salmonella tester strains TA1535 and TA100 in multiple studies. Generally, mutagenic activity was greater without liver S9 metabolic activation. Induced gene-mutation in L5178Y mouse lymphoma cells. Induced gene-mutation and chromosome damage in Chinese hamster V79 cells. Induced cell transformation in Syrian hamster BHK cells based on clonal growth in soft agar. Did not induce evidence of chromosome damage in a mouse dominant lethal oral gavage study conducted up to a high dose level of 10 grams/kg and in a mouse micronucleus test conducted up to a high dose of 5000 mg/kg. Negative in a male mouse spermatocyte cytogenetic assay with treatment for 5 days by oral gavage up to a high dose of 3000 mg/kg. Did not induce an increase in the frequency of chromosome damage in a Chinese hamster bone marrow cytogenetic test by oral gavage up to a high dose of 3300 mg/kg. Failed to induce an increase of DNA strand breaks in rat liver cells following oral gavage treatment with 500 mg/kg as measured by alkaline elution.
	Carcinogenicity	In a rat oral gavage OECD 453 study there was no evidence of carcinogenicity up to the high dose level of 100 mg/kg/day. OECD Test Guideline 453 dermal exposure studies were conducted on male mice and female rats. No evidence of carcinogenicity was observed in male mice treated up to the high dose of 100 mg/kg/day and female rats exposed up to a high dose level of 1000 mg/kg/day.
	Reproductive Toxicity	No adverse effects observed. O.E.C.D. Test Guideline 416 GLP two-generation rat oral gavage study conducted up to a high dose level of 750 mg/kg/day that resulted in adult body weight decrements.
	Developmental / Teratogenic Toxicity	No evidence of toxicity in rats and rabbits exposed by oral gavage or in rabbits treated by the dermal route in OECD Test Guideline 414 GLP studies. The oral gavage studies were conducted up to a high dose level of 180 mg/kg/day that produced maternal toxicity base on decreased body weight gain. The rabbit dermal study was conducted up to a high dose of 300 mg/kg/day that induced maternal toxicity based on reduced body weight gain.

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	STOT - Single Exposure	No applicable toxicity data. No known significant effects or critical hazards.
	STOT - Repeated Exposure	In a rat OECD test guideline 408 sub chronic oral study the NOAEL was 50 mg/kg/day. Significant dose-related evidence of hematotoxicity was observed at doses of 250 & 1000 mg/kg/day. There was a significant increase of blood urea nitrogen at 250 & 1000 mg/kg/day and slight histopathological evidence of kidney involvement at the high dose of 1000 mg/kg/day. Histological examination identified slight to moderate degeneration of the seminiferous tubules at 1000 mg/kg/day and possible uterine effects at the same dose. The NOAEL for a rat 90-day dermal (5 days/week) study was 100 mg/kg/day due to body weight decrements at 1000 mg/kg/day. Based on chronic dermatitis the LOAEL for adverse dermal effects in this study was 10 mg/kg/day. No evidence of neurotoxicity was observed in a rat 90-day dermal OECD Test Guideline no. 411 GLP study conducted up to a high dose level of 1000 mg/kg/day with FOB, motor activity and neurohistopathological assessments.
	Aspiration Hazard	No applicable toxicity data. No known significant effects or critical hazards.
cumene hydroperoxide (80-15-9)	Acute Toxicity - oral	No data available.
	Acute Toxicity - dermal	No data available.
	Acute Toxicity - inhalation	No data available.
	Skin Corrosion/Irritation	Adverse effects observed – Corrosive.
	Serious Eye Damage/ Irritation	Adverse effects observed – Irritating.
	Skin Sensitizer	No data available.
	Respiratory Sensitizer	No data available.
	Germ Cell Mutagenicity	No data available.
	Carcinogenicity	No data available.
	Reproductive Toxicity	No data available.
	Developmental / Teratogenic Toxicity	NOAEL, oral: 100 mg/kg bw/day (subchronic, rat)
	STOT - Single Exposure	No data available.
	STOT - Repeated Exposure	No data available.
	Aspiration Hazard	No data available.
2,6-di-tert-butyl-p-cresol (128-37-0)	Acute Toxicity - oral	No adverse effect observed LD50 6 000 mg/kg bw
	Acute Toxicity - dermal	No adverse effect observed LD50 2 000 mg/kg bw
	Acute Toxicity - inhalation	No applicable toxicity data. No known significant effects or critical hazards.
	Skin Corrosion/Irritation	No adverse effect observed (not irritating)
	Serious Eye Damage/Irritation	No adverse effect observed (not irritating)

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	Skin Sensitizer	No adverse effect observed (not sensitising)
	Respiratory Sensitizer	No applicable toxicity data. No known significant effects or critical hazards.
	Germ Cell Mutagenicity	InVitro: No adverse effect observed (negative) InVivo: No adverse effect observed (negative)
	Carcinogenicity	No applicable toxicity data. No known significant effects or critical hazards.
	Reproductive Toxicity	Adverse effect observed NOAEL, oral 25 mg/kg bw/day (chronic, rat)
	Developmental / Teratogenic Toxicity	No applicable toxicity data. No known significant effects or critical hazards.
	STOT - Single Exposure	No applicable toxicity data. No known significant effects or critical hazards.
	STOT - Repeated Exposure	Adverse effect observed NOAEL, oral 25 mg/kg bw/day (chronic, rat)
	Aspiration Hazard	No applicable toxicity data. No known significant effects or critical hazards.
Hydroquinone (123-31-9)	Acute Toxicity - oral	Adverse effect observed LD50 367 mg/kg bw.
	Acute Toxicity - dermal	No applicable toxicity data.
	Acute Toxicity - inhalation	No applicable toxicity data.
	Skin Corrosion/Irritation	No adverse effect observed (not irritating).
	Serious Eye Damage/Irritation	Adverse effect observed (irritating).
	Skin Sensitizer	Adverse effect observed (sensitising).
	Respiratory Sensitizer	No study available.
	Germ Cell Mutagenicity	No applicable toxicity data.
	Carcinogenicity	Adverse effect observed NOAEL, oral 25 mg/kg bw/day (chronic, rat)
	Reproductive Toxicity	No applicable toxicity data.
	Developmental / Teratogenic Toxicity	No applicable toxicity data.
	STOT - Single Exposure	No applicable toxicity data.
	STOT - Repeated Exposure	ORAL: Adverse effect observed NOAEL 20 mg/kg bw/day (chronic, rat) DERMAL: No adverse effect observed NOAEL 3 840 mg/kg bw/day (subacute, rat)
	Aspiration Hazard	No applicable toxicity data.

11.2 Information on Other Hazards

11.2.1 Endocrine Disrupting Properties

2,6-di-tert-butyl-p-cresol is under assessment as a possible endocrine disruptor on EDL List II (under assessment).

11.2.2 Other Information

No additional information available.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity

Classified as Aquatic Toxicity – Acute category 2 based on >25% 10 × Category 1 ingredients. Classified as Aquatic Toxicity – Chronic category 3 based on >25% M × 100 Category 1 + M × 10 × Category 2 ingredients. Please see Section 8.1 for PNECs on individual ingredients.

12.2 Persistence and Biodegradability

No data available for the mixture.

methyl methacrylate (80-62-6)	Readily biodegradable in water (100%)
2-hydroxyethyl methacrylate (868-77-9)	Readily biodegradable in water (100%)
cumene hydroperoxide (80-15-9)	Under test conditions, no biodegradation in water observed. (100%)
2,6-di-tert-butyl-p-cresol (128-37-0)	Under test conditions, no biodegradation in water observed. (100%)
Hydroquinone (123-31-9)	Readily biodegradable in water (100%)

12.3 Bioaccumulative Potential

No data available for the mixture.

methyl methacrylate (80-62-6)	No data available. Koc at 20°C is 9.14.
2-hydroxyethyl methacrylate (868-77-9)	No data available.
cumene hydroperoxide (80-15-9)	No data available.
2,6-di-tert-butyl-p-cresol (128-37-0)	BCF 1277. Koc at 20°C is 23 030.
Hydroquinone (123-31-9)	BCF 3.162 L/kg ww.

12.4 Mobility in Soil

Partially mobile in soil.

12.5 Results of PBT and vPvB assessment

No PBT or vPvB assessment has been carried out on the material.

12.6 Endocrine Disrupting Properties

2,6-di-tert-butyl-p-cresol is under assessment as a possible endocrine disruptor on EDL List II (under assessment).

12.7 Other Adverse Effects

Contains substance(s) suspected to be carcinogenic and/or mutagenic.

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material (uncured) and its container must be disposed of in a safe way.

Small amounts (during personal use) React Parts A and B together and once cured, dispose of in accordance with local regulations.

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Large amounts Contain and dispose of in accordance with local regulations. Mixing large amounts of Part A and Part B together creates an exothermic reaction and care should be taken to avoid uncontrolled heating and possible fire.

EWC 20 01 27 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS: separately collected fractions: paint, inks, adhesives and resins containing dangerous substances

EWC (cured) 20 01 28 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS: separately collected fractions: paint, inks, adhesives and resins other than those mentioned in 20 01 27

SECTION 14 – TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class	14.4 Packing Group
ADR	1133	ADHESIVES CONTAINING FLAMMABLE LIQUID, N.O.S. contains methyl methacrylate	3	II
RID	1133	ADHESIVES CONTAINING FLAMMABLE LIQUID, N.O.S. contains methyl methacrylate	3	II
ADN	1133	ADHESIVES CONTAINING FLAMMABLE LIQUID, N.O.S. contains methyl methacrylate	3	II
IMO/IMDG	1133	ADHESIVES CONTAINING FLAMMABLE LIQUID, N.O.S. contains methyl methacrylate	3	II
ICAO/IATA	1133	ADHESIVES CONTAINING FLAMMABLE LIQUID, N.O.S. contains methyl methacrylate	3	II

14.5 Environmental Hazards

Not classified as hazardous for transport.

14.6 Special Precautions for User

None known.

14.7 Maritime Transport in Bulk According to IMO instruments

Not applicable as never transported in bulk.

SECTION 15 – REGULATORY INFORMATION

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

REACH EC1907/2006 Annex XIII, XIV, XVII 2,6-di-tert-butyl-p-cresol is under assessment as a possible endocrine disruptor on EDL List II. All other substance(s) in this product are not listed / not subject to restrictions.

International Agency for Research on Cancer (IARC) This substance(s) contains 2,6-di-tert-butyl-p-cresol that may be subject to restrictions.

Australia Inventory of Industrial Chemicals (AIIC) Methyl methacrylate is not listed. All other substance(s) in this product are listed.

New Zealand Inventory (NZIoC) Methyl methacrylate is not listed. All other substance(s) in this product are listed.

Canada Domestic Substances List (DSL) / Non-Domestic Substance List (NDSL) Methyl methacrylate is not listed. All other substance(s) in this product are listed.

United States Inventory (TSCA 8b) The substance(s) in this product are listed.

California Proposition 65 The substance(s) in this product are not listed / not subject to restrictions.

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Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-to-Know Act (EPCRA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Section 112(r) of the Clean Air Act (CAA) Methyl methacrylate, cumene hydroperoxide and hydroquinone are listed and subject to reporting. All other substance(s) in this product are not listed / not subject to restrictions.

15.2 Chemical Safety Assessment

Not yet done.

SECTION 16 – OTHER INFORMATION

Alternative names used on consumer packaging:

CAS No.	Ingredient Name (IUPAC)	Name used on Consumer Packaging
80-62-6	methyl methacrylate	Methyl methacrylate
868-77-9	2-hydroxyethyl methacrylate	Glycol methacrylate
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin, MW ≤ 700	Epoxy resin
80-15-9	cumene hydroperoxide	cumene hydroperoxide
128-37-0	2,6-di-tert-butyl-p-cresol	BHT
123-31-9	Hydroquinone	Quinol

Changes from previous version:

Date changed	Section	Changes
2023.04.20	2, 3, 8, 11	Re-evaluated hazard after additional training.
	2, 3, 11	Separated hardener and resin classification. (The label on the pack will combine the information for both parts)
	1	Confirmed emergency contact details.
	15	Confirmed regulatory information and added information for several regulations.
	16	Added list of abbreviations used.
2018.10.03	14	Added excepted and limited quantities.
2016.02.02		Generated using the GHS.

Abbreviations used:

ADN	European Agreement concerning the International Carriage of Dangerous Goods on Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioaccumulation factor
CAS No.	Chemical Abstract Services Number
DNEL	Derived no-effect level
EC3	Effective concentration required to produce a three-fold increase in the stimulation index
EC No.	European Community Number
ECHA	European Chemicals Agency
EWC	European Waste Code

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GCL	Generic concentration limit
GLP	Good Laboratory Practice
HSNO	Hazardous Substances and New Organisms Act
IATA	International Air Transport Association
IBC	International Bulk Container
ICAO	International Civil Aviation Authority
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LD50	Lethal dose to 50% of test population
LLNA	Local lymph node assay
LT	Long term
mg/kg bw	milligrams per kilogram of body weight
mg/kg dwt	milligrams per kilogram dry weight
NOAEL	No observed adverse effect level
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
RID	European Agreements Concerning the International Carriage of Dangerous Goods by Rail
SCBA	Self-contained breathing apparatus
SCL	Specific Concentration Limit
ST	Short term
STOT-SE	Specific target Organ Toxicity - Single Exposure
UN	United Nations
vPvB	very Persistent and very Bioaccumulative