SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**Rear View Mirror Adhesive (Part A – Adhesive)**
Product Code:	AT058B
Product Use:	Adhesive: component
Restriction of use:	Refer to Section 15
New Zealand Supplier:	**Glasscorp Limited**
Address:	**124 Bush Road** **Albany** **Auckland** **New Zealand**
Telephone:	09 415 6338
Fax Number:	09 415 6339
Website	www.glasscorp.co.nz
Emergency Telephone:	**09 415 6338 or 0800 764 766 (National Poison Line)**
Glasscorp date of issue:	30 April 2021

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code:
Oxidising Substances and Organic Peroxides (Organic Peroxides, Corrosive) – HSR002630

Pictograms:

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Organic peroxide Type C	H242	Heating may cause a fire.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity – single exposure Cat. 2	H371	May cause damage to organs.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 2	H411	Toxic to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P220	Keep or store away from clothing and combustible materials.
P234	Keep only in original container.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position 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.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Storage Code	Storage Statement
P405	Store locked up.
P410	Protect from sunlight.
P420	Store away from other materials.
P411 + P235	Store at temperatures not exceeding 38°C. Keep cool.

Disposal Code	Disposal Statement
P501	Triple rinse and dispose of according to local regulations

Section 3. Composition / Information on Ingredients

Hazardous Ingredients	Cas Number	Weight
2-Hydroxyethyl Methacrylate, Stabilized	868-77-9	> 36
Methacrylic Acid, Stabilized	79-41-4	< 5
Acrylate Ester	5888-33-5	3-5
Tert-Butyl Perbenzoate	614-45-9	<5
Maleic Acid	110-16-7	< 5
Ethylene Glycol substance with a community workplace exposure limit	107-21-1	< 5
Acetic Acid substance with a community workplace exposure limit	64-19-7	<0.001

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse immediately with plenty of water, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin	Remove/Take off immediately all contaminated clothing and wash before reuse. Wash skin with plenty of soap and water. If skin irritation or rash occurs: Immediately call a POISON CENTER or doctor/physician.
If Swallowed	If swallowed, do NOT induce vomiting. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. call Poisons Centre or Doctor if needed.
If Inhaled	Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Most important symptoms and effects, both acute and delayed

Symptoms:	
Swallowed:	Not applicable
Inhaled:	Irritation of the respiratory tract.
Eyes:	Causes serious eye damage.
Skin:	Causes severe skin burns. May cause an allergic skin reaction. May cause dermatitis by skin contact.
Chronic:	May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

Hazard Type	Organic Peroxide - Heating may cause a fire.
Hazards from combustion products	Hazardous combustion products: carbon oxides (CO and CO2). Nitrogen oxides. Other toxic vapors.
Suitable Extinguishing media	Carbon dioxide (CO2), dry chemical powder, foam.
Precautions for firefighters and special protective clothing	Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
HAZCHEM CODE	**2X**

Section 6. Accidental Release Measures

Equipment and emergency procedures

Evacuate all non-essential personnel. Heating may cause a fire. Isolate from fire, if possible, without unnecessary risk. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Wear recommended personal protective equipment. Use chemically protective clothing. Chemical goggles or face shield with safety glasses. In case of hazardous reactions: keep upwind. Avoid breathing vapors.

Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

Methods and materials for containment and cleaning up
Dam up the liquid spill. Take up liquid spill into inert absorbent material. Absorbed substance: shovel into drums. Dispose of waste according to the applicable local and national regulations as detailed in Section 13.

Section 7. Handling and Storage

Precautions for safe handling:

- Read label before use.
- Keep away from heat, sparks, open flames, hot surfaces. No smoking.
- Keep or store away from clothing and combustible materials.
- Keep only in original container.
- Do not breathe fumes, vapours or spray.
- Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Do not eat, drink or smoke when using this product.
- Do not get in eyes, on skin, or on clothing.
- Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
- Keep containers tightly closed.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for safe storage:

- Store locked up.
- Keep out of reach of children.
- Protect from sunlight.
- Store away from other materials.
- Store at temperatures not exceeding 38°C. Keep cool.
- Keep container closed when not in use.
- Keep container in a well-ventilated place.
- Store only in a dilute solution.
- Store in a dry area.
- Store away from incompatible materials listed in Section 10.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Methacrylic acid	[79-41-4]	20	70	-	-
Ethylene glycol (vapour and mist)	[107-21-1]		Ceiling 50ppm (127mg/m3)		
Acetic acid	[64-19-7]	10	25	15	37

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION

Engineering Controls:
Ensure adequate ventilation is available.

Personal Protection Equipment

Eyes	Always use safety glasses or a face shield when handling this product.
Hands and Skin	Wear gloves and protective clothing.
Respiratory	In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9 Physical and Chemical Properties

Appearance	Clear Colourless Liquid
Odour	Not available
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density @ 20^{0}C	Not available
Relative Density	Not available
Density @ 15^{0}C	Not available
Soluble in water	Poorly soluble in water.
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions:	No additional information available.
Conditions to Avoid	No additional information available.
Incompatible Materials	No additional information available.
Hazardous Decomposition Products	Carbon dioxide. Carbon monoxide. Irritating organic vapors. Oxides of Nitrogen.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes serious eye damage.
Skin	Causes skin burns. May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.

Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Causes damage to organs.
STOT/RE	May cause damage to organs (respiratory) through repeated or prolonged exposure. May cause respiratory irritation.

2-hydroxyethyl methacrylate, stabilized (868-77-9)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit)
methacrylic acid, stabilized (79-41-4)	
LD50 oral rat	1060 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 1320 mg/kg bodyweight; Rat)
LD50 dermal rabbit	500 mg/kg body weight (Rabbit; Experimental value; Other; 500-1000 mg/kg bodyweight; Rabbit)
LC50 inhalation rat (mg/l)	7 mg/l/4h (Rat)
tert-butyl perbenzoate (614-45-9)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
LC50 inhalation rat (mg/l)	> 20 mg/l/4h (Rat)
ethylene glycol (107-21-1)	
LD50 oral rat	> 5000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	10626 mg/kg
acetic acid (64-19-7)	
LD50 oral rat	3310 mg/kg body weight (Rat; Other; Read-across)
maleic acid (110-16-7)	
LD50 oral rat	2870 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	2620 mg/kg (Rabbit; Read-across; Equivalent or similar to OECD 402)
acrylate ester (5888-33-5)	
LD50 oral rat	4890 mg/kg (Rat; Literature)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit; Literature)

Section 12. Ecotoxicological Information

Aquatic Chronic: Toxic to aquatic life with long lasting effects.

2-hydroxyethyl methacrylate, stabilized (868-77-9)	
LC50 fish 1	227 mg/l (96 h; Pimephales promelas; Measured concentration)
LC50 fish 2	360 mg/l (48 h; Leuciscus idus)
methacrylic acid, stabilized (79-41-4)	
LC50 fish 1	100-180,96 h; Brachydanio rerio; Lethal
LC50 fish 2	85 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	100-180,24 h; Daphnia magna; Lethal
EC50 Daphnia 2	> 130 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	45 mg/l (72 h; Selenastrum capricornutum; Growth rate)
tert-butyl perbenzoate (614-45-9)	
LC50 fish 1	8.6 mg/l (96 h; Brachydanio rerio)
LC50 fish 2	6 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 1	16.7 mg/l (48 h; Daphnia magna)
EC50 Daphnia 2	25.3 mg/l (24 h; Daphnia magna)
Threshold limit algae 1	1.3 mg/l (72 h; Algae)
ethylene glycol (107-21-1)	
LC50 fish 1	53000 mg/l (96 h; Pimephales promelas; Static system)
LC50 fish 2	40761 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Static system)
EC50 Daphnia 1	> 10000 mg/l (24 h; Daphnia magna)
Threshold limit algae 1	> 10000 mg/l (168 h; Scenedesmus quadricauda)
Threshold limit algae 2	2000 mg/l (192 h; Microcystis aeruginosa)
acetic acid (64-19-7)	

LC50 fish 1	75 mg/l (96 h; Lepomis macrochirus; GLP)
LC50 fish 2	94 mg/l (96 h; Oryzias latipes)
EC50 Daphnia 1	47 mg/l (24 h; Daphnia magna; Not neutralized)
EC50 Daphnia 2	95 mg/l (24 h; Daphnia magna; Static system)
TLM fish 1	100 ppm (96 h; Carassius auratus)
Threshold limit algae 1	90 mg/l (192 h; Microcystis aeruginosa; Neutralized)
Threshold limit algae 2	4000 mg/l (192 h; Scenedesmus quadricauda; Neutralized)
maleic acid (110-16-7)	
LC50 fish 1	240 mg/l (48 h; Gambusia affinis)
LC50 fish 2	5 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	316 mg/l (48 h; Daphnia magna; GLP)
EC50 Daphnia 2	42.81 mg/l (48 h; Daphnia magna)
TLM fish 1	240 ppm (48 h; Gambusia affinis)
TLM fish 2	5 ppm (96 h; Pimephales promelas)
Threshold limit algae 1	74.35 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)

Persistence and degradability

2-hydroxyethyl methacrylate, stabilized (868-77-9)	
Persistence and degradability	Readily biodegradable in water. Biodegradability in soil: no data available. Adsorbs into the soil.
methacrylic acid, stabilized (79-41-4)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.89 g O_2/g substance
ThOD	1.67 g O_2/g substance
BOD (% of ThOD)	0.5329 % ThOD
tert-butyl perbenzoate (614-45-9)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.14 g O_2/g substance
BOD (% of ThOD)	72 % ThOD
ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O_2/g substance
Chemical oxygen demand (COD)	1.24 g O_2/g substance
ThOD	1.29 g O_2/g substance
BOD (% of ThOD)	0.36 % ThOD
acetic acid (64-19-7)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O_2/g substance
Chemical oxygen demand (COD)	1.03 g O_2/g substance
ThOD	1.07 g O_2/g substance
maleic acid (110-16-7)	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance
Biochemical oxygen demand (BOD)	0.38 g O_2/g substance
Chemical oxygen demand (COD)	0.83 g O_2/g substance
ThOD	0.83 g O_2/g substance
acrylate ester (5888-33-5)	
Persistence and degradability	No test data available. No (test)data on mobility of the substance available.

Bioaccumulative potential

2-hydroxyethyl methacrylate, stabilized (868-77-9)	
BCF fish 1	1.3 - 1.5 (Pisces; Calculated value)
Log Pow	-0.55 - 0.49
2-hydroxyethyl methacrylate, stabilized (868-77-9)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
methacrylic acid, stabilized (79-41-4)	
BCF other aquatic organisms 1	3

Log Pow	0.93 (Experimental value; 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
tert-butyl perbenzoate (614-45-9)	
Bioconcentration factor (BCF REACH)	93
Log Pow	2.9
Log Kow	750
Bioaccumulative potential	Bioaccumable.
ethylene glycol (107-21-1)	
BCF fish 1	10 (72 h; Leuciscus idus)
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp.; Chronic)
BCF other aquatic organisms 2	190 (24 h; Algae)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
acetic acid (64-19-7)	
BCF fish 1	3.16 (Pisces)
Log Pow	-0.17 (Experimental value; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
maleic acid (110-16-7)	
BCF fish 1	< 10 (72 h; Leuciscus idus)
BCF other aquatic organisms 1	11 (24 h; Chlorella sp.)
Log Pow	-1.3 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
acrylate ester (5888-33-5)	
Log Pow	4.21 (Estimated value)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

Mobility in Soil

methacrylic acid, stabilized (79-41-4)	
Surface tension	0.0659 N/m (20 °C; 1.01 g/l)
ethylene glycol (107-21-1)	
Surface tension	0.048 N/m (20 °C)
acetic acid (64-19-7)	
Surface tension	0.028 N/m (20 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:
Spent media that has removed toxic chemicals should be examined for specific hazards. Spilled product may be recovered for use if it has not come in contact with liquids or been exposed to significant amounts of gaseous contaminants. Dispose of according to Local Regulations.

Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste – Corrosive, Ecotoxic" and that the label also has the appropriate pictograms from section 2, waste type identifier, and the business name, address, and phone number.

Precautions or methods to avoid: Do not allow to enter waterways.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Road, Rail, Sea and Air Transport

UN No	1760
Class - Primary	8
Packing Group	II
Proper Shipping Name	CORROSIVE LIQUID, N.O.S. (contains Methacrylic Acid and Maleic Acid)
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 1L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

EPA Approval Code: Oxidising Substances and Organic Peroxides (Organic Peroxides, Corrosive) – HSR002630

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Location Certificate	10L (Org Perox.C)
Signage Trigger Quantities (Schedule 3)	10L (Org Perox.C)
Emergency Response Plan (Schedule 5)	25L (Org Perox.C)
Secondary Containment (Schedule 5)	25L (Org Perox.C)
Tracking (Schedule 26)	Not required
Restriction of use	Only for intended use.

Section 16 Other Information

Glossary

Cat.	Category
AWC	Aggregate water capacity.
EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012

5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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