

MARLEY CLEAR Version 1.01 Revision Date 29-Oct-2017 Supersedes Date: 07-Jun-2017

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

1.1. Product Identifier

Product NameMARLEY CLEARPure substance/mixtureMixture

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

Recommended use	Adhesives.
Uses Advised Against	No information available.

1.3. Details of the supplier of the safety data sheet

Company Name Bostik New Zealand Limited 19 Eastern Hutt Road Wingate, Lower Hutt, New Zealand Tel: 04-567 5119 Fax: 04-567 5412 Manufacturer Bostik Australia Pty Ltd 51-71 High street, Thomastown Victoria Australia Tel: 613 9279-9333 Fax: 613 9279-9342 24-hr Emergency: 1800 033 111

1.4. Emergency telephone number

Emergency Telephone

24 Hr: 0800 243 622 Poison Centre : 0800 764 766

E-mail address

SDS.AP@Bostik.com

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Skin Corrosion/Irritation	Category 2 (6.3A)
Serious Eye Damage/Eye Irritation	Category 1 (8.3A)
STOT - Single Exposure	Category 3 (^f)
Flammable Liquids	Category 2 (3.1B)

Classification in parenthesis is applicable for New Zealand Hazard Classification

ERMA Group

HSR002662

2.2. Label Elements



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Hazard statements

H315 - Causes skin irritation

H318 - Causes serious eye damage

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

Precautionary Statements - Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P233 Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P235 - Keep cool

Precautionary Statements - Response

P321 - Specific treatment (see supplemental first aid instructions on this label)

Inhalation

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

Skin

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P363 - Wash contaminated clothing before reuse

EYES

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

Fire

In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other Hazards

• May be harmful if swallowed

• May be harmful in contact with skin

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

3.2 Mixtures

Chemical Name	CAS No.	Weight-%
Acetone	67-64-1	20- <40
Methyl ethyl ketone	78-93-3	20- <40
Cyclohexanone	108-94-1	20- <40
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW	25068-38-6	0.1- <1

*** Any remaining ingredients are not hazardous

Section 4: FIRST AID MEASURES

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4.1. Description of first aid measures

General Advice	If medical advice is needed, have product container or label at hand.
Inhalation	Remove to fresh air.
Skin Contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention.
Eye contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
Ingestion	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Self-Protection of the First Aider	Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
4.2. Most important symptoms and	d effects, both acute and delayed
Symptoms	None known.
4.3. Indication of any immediate m	edical attention and special treatment needed
Note to physicians	Treat symptomatically.
4.4. Reference to Other Sections	
Reference to other sections	See Section 12: ECOLOGICAL INFORMATION. Section 7: HANDLING AND STORAGE. Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.
Section 5: FIRE-FIGHTING N	/IEASURES
Section 5: FIRE-FIGHTING N 5.1. Extinguishing media	/IEASURES
	IEASURES Use CO2, dry chemical, or foam.
5.1. Extinguishing media	
5.1. Extinguishing media Suitable Extinguishing Media	Use CO2, dry chemical, or foam. No information available.
5.1. Extinguishing media Suitable Extinguishing Media Unsuitable Extinguishing Media 5.2. Special hazards arising from t	Use CO2, dry chemical, or foam. No information available.
5.1. Extinguishing media Suitable Extinguishing Media Unsuitable Extinguishing Media 5.2. Special hazards arising from the	Use CO2, dry chemical, or foam. No information available. he substance or mixture
5.1. Extinguishing media Suitable Extinguishing Media Unsuitable Extinguishing Media 5.2. Special hazards arising from the Specific Hazards Arising from the Chemical 5.3. Advice for firefighters	Use CO2, dry chemical, or foam. No information available. he substance or mixture
5.1. Extinguishing media Suitable Extinguishing Media Unsuitable Extinguishing Media 5.2. Special hazards arising from the Specific Hazards Arising from the Chemical 5.3. Advice for firefighters Special Protective Equipment for	Use CO2, dry chemical, or foam. No information available. he substance or mixture Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Wear self contained breathing apparatus for fire fighting if necessary.
5.1. Extinguishing media Suitable Extinguishing Media Unsuitable Extinguishing Media 5.2. Special hazards arising from the Specific Hazards Arising from the Chemical 5.3. Advice for firefighters Special Protective Equipment for Fire-fighters Section 6: ACCIDENTAL RE	Use CO2, dry chemical, or foam. No information available. he substance or mixture Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Wear self contained breathing apparatus for fire fighting if necessary.
5.1. Extinguishing media Suitable Extinguishing Media Unsuitable Extinguishing Media 5.2. Special hazards arising from the Specific Hazards Arising from the Chemical 5.3. Advice for firefighters Special Protective Equipment for Fire-fighters Section 6: ACCIDENTAL RE	Use CO2, dry chemical, or foam. No information available. <u>he substance or mixture</u> Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Wear self contained breathing apparatus for fire fighting if necessary.
 <u>5.1. Extinguishing media</u> Suitable Extinguishing Media Unsuitable Extinguishing Media <u>5.2. Special hazards arising from the</u> Specific Hazards Arising from the Chemical <u>5.3. Advice for firefighters</u> Special Protective Equipment for Fire-fighters <u>Section 6: ACCIDENTAL RE</u> <u>6.1. Personal precautions, protect</u> 	Use CO2, dry chemical, or foam. No information available. he substance or mixture_ Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Wear self contained breathing apparatus for fire fighting if necessary. ELEASE MEASURES ive equipment and emergency procedures_ Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate
 <u>5.1. Extinguishing media</u> Suitable Extinguishing Media Unsuitable Extinguishing Media <u>5.2. Special hazards arising from the</u> Specific Hazards Arising from the Chemical <u>5.3. Advice for firefighters</u> Special Protective Equipment for Fire-fighters <u>Section 6: ACCIDENTAL RE</u> <u>6.1. Personal precautions, protect</u> Personal Precautions 	Use CO2, dry chemical, or foam. No information available. he substance or mixture Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Wear self contained breathing apparatus for fire fighting if necessary. KLEASE MEASURES ive equipment and emergency procedures Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.

6.2. Environmental precautions

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Environmental Precautions	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
6.3. Methods and material for cont	ainment and cleaning up
Methods for Containment	Dike far ahead of spill; use dry sand to contain the flow of material. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
Methods for cleaning up	Use clean non-sparking tools to collect absorbed material. Dike far ahead of spill for later disposal.
6.4. Reference to other sections	
Reference to other sections	See Section 12: ECOLOGICAL INFORMATION Section 7: HANDLING AND STORAGE Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 7: HANDLING AND	STORAGE
7.1. Precautions for safe handling	_
Advice on safe handling	Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static charges. Use explosion-proof electrical/ ventilating/ lighting/ equipment.
7.2. Conditions for safe storage, in	cluding any incompatibilities
General Hygiene Considerations	Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.
Storage Conditions	Keep only in the original container/package in a cool well-ventilated place. Protect from moisture.
Incompatible Materials	Strong acids and bases
7.3. Specific end use(s)	
OTHER INFORMATION	No information available.
7.4. References to Other Sections	
Reference to other sections	See Section 12: ECOLOGICAL INFORMATION. Section 7: HANDLING AND STORAGE. Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.
Section 8: EXPOSURE CON	TROLS/PERSONAL PROTECTION

8.1. Control parameters

<u>Exposure Limits</u> This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical Name	New Zealand	Australia	European Union
Acetone	TWA: 500 ppm	500 ppm TWA	TWA: 500 ppm
67-64-1	TWA: 1185 mg/m ³	1185 mg/m ³ TWA	TWA: 1210 mg/m ³
	STEL: 1000 ppm	1000 ppm STEL	_
	STEL: 2375 mg/m ³	2375 mg/m ³ STEL	
Methyl ethyl ketone	TWA: 150 ppm	150 ppm TWA	TWA: 200 ppm
78-93-3	TWA: 445 mg/m ³	445 mg/m ³ TWA	TWA: 600 mg/m ³
	STEL: 300 ppm	300 ppm STEL	STEL: 300 ppm
	STEL: 890 mg/m ³	890 mg/m ³ STEL	STEL: 900 mg/m ³
Cyclohexanone	TWA: 25 ppm	25 ppm TWA	TWA: 10 ppm
108-94-1	TWA: 100 mg/m ³	100 mg/m ³ TWA	TWA: 40.8 mg/m ³

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	Skin		STEL: 20 ppm STEL: 81.6 mg/m ³ S*
Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL
Acetone	STEL: 500 ppm	IDLH: 2500 ppm	TWA: 1000 ppm
67-64-1	TWA: 250 ppm	TWA: 250 ppm	TWA: 2400 mg/m ³
		TWA: 590 mg/m ³	
Methyl ethyl ketone	STEL: 300 ppm	IDLH: 3000 ppm	TWA: 200 ppm
78-93-3	TWA: 200 ppm	TWA: 200 ppm	TWA: 590 mg/m ³
		TWA: 590 mg/m ³	
		STEL: 300 ppm	
		STEL: 885 mg/m ³	
Cyclohexanone	STEL: 50 ppm	IDLH: 700 ppm	TWA: 50 ppm
108-94-1	TWA: 20 ppm	TWA: 25 ppm	TWA: 200 mg/m ³
	S*	TWA: 100 mg/m ³	-

Derived No Effect Level (DNEL)	No information available
Predicted No Effect Concentration (PNEC)	No information available
OTHER INFORMATION	No information available
8.2. Exposure controls	
Engineering Controls	Ensure adequate ventilation, especially in confined areas.
PPE - Personal Protection Equipm	ent
Eye/Face Protection Skin and Body Protection	Wear safety glasses with side shields (or goggles). Wear suitable protective clothing. No special technical protective measures are necessary under normal conditions.
Hand Protection	Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.
Respiratory Protection	No protective equipment is needed under normal use conditions. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of professional filter is recommended.
General Hygiene Considerations	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse.

Environmental Exposure Controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Color Odor Odor Threshold	Medium Viscosity Liquid Clear, colorless Solvent No information available	
<u>Property</u> pH Melting point / freezing point Boiling Point Flash Point	<u>Values</u> No information available No information available approx 66 °C / 150.8 °F approx -15 °C / 5 °F	<u>Remarks • Method</u>
Evaporation Rate Flammability (solid, gas) Flammability Limit in Air Upper Flammability Limit Lower Flammability Limit Vapor Pressure	No information available No information available 10.9 1.7 No information available	Not applicable for liquids

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Vapor Density Relative Density Water Solubility Solubility in Other Solvents Partition Coefficient Autoignition Temperature Decomposition Temperature Kinematic Viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties

9.2. Other information Softening Point Molecular Weight Solvent content (%) Solid content (%) Density Bulk Density VOC No information available No information available Partially soluble No information available 321 °C / 609.8 °F No information available No information available

No information available No information available No information available approx 22 0.9 g/cm³ No information available > 300 g/L

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity Stable under recommended storage conditions. 10.2. Chemical stability Stability Stable under recommended storage conditions 10.3. Possibility of hazardous reactions Possibility of Hazardous Reactions None under normal processing. **Hazardous Polymerization** None under normal processing. 10.4. Conditions to avoid Conditions to avoid Keep away from heat, sparks and flames. Protect from moisture. 10.5. Incompatible materials **Incompatible Materials** Strong acids and bases. 10.6. Hazardous decomposition products None under normal use conditions. Hazardous decomposition products

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

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Numerical measures of toxicity

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity 51.67199 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas) 53.33799 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor) 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone 67-64-1	= 5800 mg/kg(Rat)	>15800 mg/Kg (rat)	= 79 mg/l(Rat) 4 h
Methyl ethyl ketone 78-93-3	= 2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat)4 h
Cyclohexanone 108-94-1	= 1535 mg/kg (Rat)	= 947 mg/kg (Rabbit)	= 8000 ppm (Rat)4 h
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW 25068-38-6	LD50 (rat) > 2000 mg/kg OECD 420	>2000 mg/Kg (rat)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Sensitization Germ Cell Mutagenicity Reproductive Toxicity STOT - Single Exposure STOT - Repeated Exposure	No information available. No information available. No information available. No information available. No information available.
STOT - Repeated Exposure Target Organ Effects Aspiration hazard Carcinogenicity	No information available. Central nervous system, Eyes, Kidney, Liver, Respiratory system, Skin. No information available. No information available.
Carcinogenicity	no mormation available.

Chemical Name	IARC	China	Japan
Cyclohexanone	Group 3	-	-
IARC (International Agency for	Group 3 - Not Classifiable as	s to Carcinogenicity in Humans	

Research on Cancer)

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Product Information None known.

Component Information

Data obtained on the component(s) include

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Acetone 67-64-1	-	LC50 96 h 4.74 - 6.33 mL/L (Oncorhynchus mykiss)	EC50 48 h 10294 - 17704 mg/L (Daphnia magna Static)
Methyl ethyl ketone 78-93-3	EC50=1972 mg/l (Pseudokirchneriella subcapitata)	LC50 96 h 3130 - 3320 mg/L (Pimephales promelas flow-through)	EC50 48 h > 308 mg/L (Daphnia magna)
Cyclohexanone 108-94-1	EC50 96 h = 20 mg/L (Chlorella vulgaris)	LC50 96 h 481 - 578 mg/L (Pimephales promelas flow-through)	EC50 24 h = 800 mg/L (Daphnia magna)
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW 25068-38-6	EC50 (72h) = 9.4 mg/L (Scenedesmus capricornutum) EPA-660/3-75-009	1.2 mg/l 96Hr (Oncorhynchus mykiss)	2.7 mg/l 48hr Daphia Magna

12.2. Persistence and degradability

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No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No information available. Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Bisphenol-A-Epichlorhydrin Epoxy resin <= 700 MW	Group III Chemical	-	-

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused	Disposal should be in accordance with applicable regional, national and local laws and
Products	regulations.

Contaminated Packaging Improper disposal or reuse of this container may be dangerous and illegal.

Section 14: TRANSPORTATION INFORMATION

IMDG UN/ID No Proper Shipping Name Hazard Class Packing Group EmS-No Limited Quantity (LQ) Description	UN1133 Adhesives 3 II F-E, S-D 5 L UN1133, Adhesives, 3, II, (-15°C c.c.)
IATA_ UN/ID No Proper Shipping Name Hazard Class Packing Group ERG Code Limited Quantity (LQ) Special Provisions Description	UN1133 Adhesives 3 II 3L 1 L A3 UN1133, Adhesives, 3, II
ADR_ UN/ID No Proper Shipping Name Hazard Class Hazard Labels Packing Group Description Environmental Hazard	UN1133 Adhesives, Environmentally Hazardous 3 3 II UN1133, Adhesives, Environmentally Hazardous, 3, II, Yes

(D/E)

Limited Quantity (LQ)	5 L
Special Provisions	640C
Classification Code	F1
Tunnel Restriction Code	(D/E)

Section 15: REGULATORY INFORMATION

National Regulations

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet No information available

Key Literature References and Sources for Data

No information available

Prepared By	Product Safety & Regulatory Affairs
Revision Date	29-Oct-2017
Revision Note	Not applicable.
Training Advice	Provide adequate information, instruction, and training for operator

Disclaimer

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

End of Safety Data Sheet