

MARLEY MCS White
 Revision Number 1.02

Revision Date 14-Jan-2018
Supersedes Date: 05-Nov-2017

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

1.1. Product Identifier

Product Name MARLEY MCS White
Pure substance/mixture Mixture

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

Recommended use Adhesives.
Uses advised against Consumer use, This article contains hazardous substances or mixtures intended to be released under normal or reasonably foreseeable conditions of use.

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 New Zealand Limited
 19 Eastern Hutt Road Wingate,
 Lower Hutt, New Zealand
 Tel: 04-567 5119
 Fax: 04-567 5412

1.4. Emergency telephone number

Emergency Telephone 24 Hr: 0800 243 622
 +64 4 917 9888
 Poison Centre : 0800 764 766

E-mail address SDS.AP@Bostik.com

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Serious Eye Damage/Eye Irritation	Category 2 (6.4)
Carcinogenicity	Category 2 (6.7B)
Reproductive toxicity	Category 1B (6.8A)
STOT - Single Exposure	Category 3 (i)
Acute aquatic toxicity	Category 3 (9.1D)
Chronic aquatic toxicity	Category 3 (9.1C)
Flammable Liquids	Category 2 (3.1B)

Classification in parenthesis is applicable for New Zealand Hazard Classification

ERMA Group HSR002669

2.2. Label Elements



Signal Word DANGER

Hazard statements
 H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness

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H351 - Suspected of causing cancer
H360 - May damage fertility or the unborn child
H412 - Harmful to aquatic life with long lasting effects
H225 - Highly flammable liquid and vapor

Precautionary Statements - Prevention

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P281 - Use personal protective equipment as required
P264 - Wash face, hands and any exposed skin thoroughly after handling
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
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

P308 + P313 - IF exposed or concerned: Get medical advice/attention

Inhalation

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

Skin

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

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

P337 + P313 - If eye irritation persists: Get medical advice/attention

Fire

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

Precautionary Statements - Storage

P405 - Store locked up

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

Precautionary Statements - Disposal

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

2.3. Other Hazards

- May be harmful if swallowed

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

3.2 Mixtures

Chemical Name	CAS No	Weight-%
Methyl ethyl ketone	78-93-3	20- <40
Tetrahydrofuran	109-99-9	10 - <20
Dibutyltin dilaurate	77-58-7	0.1- <1

*** Any remaining ingredients are not hazardous

Section 4: FIRST AID MEASURES

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.

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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 effects, both acute and delayed

Symptoms None known.

4.3. Indication of any immediate medical 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 MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use CO2, dry chemical, or foam.

Unsuitable Extinguishing Media No information available.

5.2. Special hazards arising from the substance or mixture

Specific Hazards Arising from the Chemical Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3. Advice for firefighters

Special Protective Equipment for Fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.

Other Information Water spray may reduce vapor; but may not prevent ignition in closed spaces.

For emergency responders Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Environmental precautions

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 containment and cleaning up

Methods for Containment Dike far ahead of spill; use dry sand to contain the flow of material. Contain and collect

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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). Protect from moisture.

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, including 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. Protect from direct contact with water or excessive 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 CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical Name	New Zealand	Australia	European Union
Methyl ethyl ketone 78-93-3	TWA: 150 ppm TWA: 445 mg/m ³ STEL: 300 ppm STEL: 890 mg/m ³	150 ppm TWA 445 mg/m ³ TWA 300 ppm STEL 890 mg/m ³ STEL	TWA: 200 ppm TWA: 600 mg/m ³ STEL: 300 ppm STEL: 900 mg/m ³
Tetrahydrofuran 109-99-9	TWA: 100 ppm TWA: 295 mg/m ³ Skin	100 ppm TWA 295 mg/m ³ TWA	TWA: 50 ppm TWA: 150 mg/m ³ STEL: 100 ppm STEL: 300 mg/m ³ S*
Dibutyltin dilaurate 77-58-7	TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ Skin	0.1 mg/m ³ TWA 0.2 mg/m ³ STEL	-

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL
Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³	TWA: 200 ppm TWA: 590 mg/m ³

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Tetrahydrofuran 109-99-9	STEL: 100 ppm TWA: 50 ppm S*	IDLH: 2000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 250 ppm STEL: 735 mg/m ³	TWA: 200 ppm TWA: 590 mg/m ³
Dibutyltin dilaurate 77-58-7	STEL: 0.2 mg/m ³ Sn TWA: 0.1 mg/m ³ Sn S*	IDLH: 25 mg/m ³ Sn TWA: 0.1 mg/m ³ except Cyhexatin Sn	TWA: 0.1 mg/m ³ Sn

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 Equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	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 No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Paste Viscous
Color	White
Odor	Solvent
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	approx 66 °C / 150.8 °F	
Flash Point	approx -6 °C / 21.2 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	Not applicable for liquids
Flammability Limit in Air		
Upper flammability limit:	11.5	
Lower flammability limit:	1.9	
Vapor Pressure	No information available	
Vapor Density	No information available	
Relative Density	No information available	
Water Solubility	Partially soluble	
Solubility in Other Solvents	No information available	
Partition Coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	

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Explosive Properties No information available
Oxidizing Properties No information available

9.2. Other information

Softening Point No information available
Molecular Weight No information available
Solvent content (%) No information available
Solid content (%) approx 46
Density 1.4 g/cm³
Bulk Density No information available
VOC > 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

Hazardous decomposition products None under normal use conditions.

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.

Numerical measures of toxicity

Unknown acute toxicity

0.154441 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
18.485091 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
28.671401 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
62.288401 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
23.553401 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
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Methyl ethyl ketone 78-93-3	= 2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h
Tetrahydrofuran 109-99-9	= 1650 mg/kg (Rat)	-	= 21000 ppm (Rat) 3 h
Dibutyltin dilaurate 77-58-7	= 2071 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

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

Skin Corrosion/Irritation	No information available.
Serious Eye Damage/Eye Irritation	No information available.
Sensitization	No information available.
Germ Cell Mutagenicity	No information available.
Reproductive Toxicity	No information available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Target Organ Effects	Central nervous system, Eyes, Lungs, Respiratory system, Skin.
Aspiration hazard	No information available.
Carcinogenicity	The following substance(s) are classified in Annex VI CLP (1272/2008) as carcinogenic.
IARC (International Agency for Research on Cancer)	<i>Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans</i>

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Product Information

Harmful to aquatic life with long lasting effects.

Component Information

Data obtained on the component(s) include

Chemical Name	Algae/aquatic plants	Fish	Crustacea
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)
Tetrahydrofuran 109-99-9	-	LC50 96 h 2700 - 3600 mg/L (Pimephales promelas static) LC50 96 h 1970 - 2360 mg/L (Pimephales promelas flow-through)	EC50 24 h = 5930 mg/L (Daphnia magna)
Dibutyltin dilaurate 77-58-7	-	LC50 48 h = 2 mg/L (Oryzias latipes)	-

12.2. Persistence and degradability

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

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No information available.
**Endocrine Disruptor
Information**

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Tetrahydrofuran	Group III Chemical	-	-

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

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

Section 14: TRANSPORTATION INFORMATION

IMDG

UN Number UN1133
Proper Shipping Name Adhesives
Transport hazard class(es) 3
Packing Group III
EmS-No F-E, S-D
Special Provisions 223, 955
Limited Quantity (LQ) 5 L
Description UN1133, Adhesives, 3, III, (-6°C c.c.)

IATA

UN/ID No UN1133
Proper Shipping Name Adhesives
Transport hazard class(es) 3
Packing Group III
ERG Code 3L
Limited Quantity (LQ) 10 L
Special Provisions A3
Description UN1133, Adhesives, 3, III

ADR

UN/ID No UN1133
Proper Shipping Name Adhesives, Environmentally Hazardous
Transport hazard class(es) 3
Labels 3
Packing Group III
Description UN1133, Adhesives, Environmentally Hazardous, 3, III, (D/E)
Environmental Hazard Yes
Limited Quantity (LQ) 5 L
Special Provisions 640E
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

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Key Literature References and Sources for Data

No information available

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Revision Date	14-Jan-2018
Revision Note	Not applicable.
Training Advice	Provide adequate information, instruction, and training for operator

Disclaimer

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End of Safety Data Sheet