

<b>1</b>	<b>IDENTIFICATION OF THE PRODUCT AND OF THE SUPPLIER</b>
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**Product Names**                    **MARLEY MCS SOLVENT CEMENT**

**Hazard Statement**            **Classified as Hazardous according to HSNO in New Zealand and Safe Work Australia**  
**Classified as a Dangerous Good according to NZS5433:1999 Transport of Dangerous Goods on Land and Australian Code for the transport of Dangerous Goods by Road & Rail.**

**Recommended Use**            Solvent cement – customer branded, various colours

<b>Supplier</b>	<b>Bostik New Zealand Limited</b>	<b>Philmac (ACN: 007 873 047)</b>
<b>Street Address</b>	19 Eastern Hutt Road, Wingate, Lower Hutt, New Zealand	53 Deeds Road, North Plympton, SA 5037, Australia
<b>Telephone</b>	++64 4 567 5119	+61 8 8300 9200
<b>Facsimile</b>	++64 4 567 5412	+61 8 8300 9390
<b>Website</b>	<a href="http://www.bostik.co.nz">www.bostik.co.nz</a>	

**Emergency Telephone Number**    **New Zealand: National Poisons Centre**  
**0800 POISON or 0800 764 766**  
**Australia: Poisons Information Centre**  
**13 11 26**

**Emergency Response**            In New Zealand    **0800 CHEMCALL or 0800 243 622**  
 In Australia        **1800 033 111**  
 Globally            **++64 3 353 0199**

**Date first prepared**            14 June 2011

<b>2</b>	<b>HAZARDS IDENTIFICATION</b>
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Note: This product contains both volatile (solvents) and non-volatile components. During the normal use of this product, the hazardous volatile components evaporate and dissipate. The remaining non-volatile component is not hazardous.

**Hazard Statement**    DANGER                    Highly flammable liquid and vapour.

**Precautions**            Keep away from ignition sources such as heat, sparks and open flames.  
 Do not handle until safety precautions have been read and understood.

**HSNO Classifications**

3.1B            Highly flammable liquid and vapour.  
 6.1D Oral      Harmful if swallowed  
 6.3A            Causes skin irritation

- 6.4A Causes serious eye irritation  
 6.7B Suspected of causing cancer  
 6.9B (l) May cause damage to organs through repeated exposure  
 9.1B Toxic to aquatic life with long lasting effects  
 9.3C Harmful to terrestrial invertebrates

**Australian Classification**

This material is classed as hazardous according to Safe Work Australia health criteria.

**Hazard Category** Xn Harmful  
**Poisons Schedule** S5: this material must be used, stored and maintained in accordance with the relevant regulations.

**Risk Phrases:**

- R20 Harmful by inhalation  
 R36 Irritating to eyes  
 R66 Repeated exposure may cause skin dryness or cracking  
 R67 Vapours may cause drowsiness and dizziness

**Safety Phrases:**

- S16 Keep away from sources of ignition  
 S23 Do not breath vapour  
 S24/25 Avoid contact with skin and eyes  
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection  
 S38 In case of insufficient ventilation, wear suitable respiratory equipment.

<b>3 COMPOSITION / INFORMATION ON INGREDIENTS</b>
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Chemical Name	CAS	Proportion
Methyl Ethyl Ketone (2-Butanone)	78-93-3	Medium
Tetrahydrofuran	109-99-9	Medium
DBTL	77-58-7	Low
Non-hazardous materials	-	To 100%

High = >60%    Medium = 10% - 60%    Low = 1% - 10%    Very Low = < 1%

<b>4 FIRST AID MEASURES</b>
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If poisoning occurs, contact  
 New Zealand: National Poison Centre 0800 764 766  
 Australia: Poison Information Centre 13 11 26

**First Aid**

<b>Inhalation</b>	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.
<b>Skin Contact</b>	Remove contaminated clothing and wash skin with warm soapy water. Do not scrub. If swelling, redness, blistering or irritation occurs, get medical assistance.
<b>Eye Contact</b>	Immediately hold open and flood with water for at least 15 minutes. Eyelids to be held open. Get medical advice.
<b>Ingestion</b>	Rinse mouth with water. Get medical advice immediately. Do NOT give anything to drink. Do NOT induce vomiting because of risk of aspiration. Never give anything by the mouth to an unconscious patient. Watch for toxic effects.
<b>Advice to Physician</b>	Treat symptomatically. Effects may be delayed.

<b>5 FIRE FIGHTING MEASURES</b>
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Clear fire area of all non-emergency personnel.

<b>Type of Hazard</b>	Flammable Liquid
<b>HAZCHEM Code</b>	3[Y]E
<b>Fire Hazard Properties</b>	Unknown due to the complex nature of this material. Fumes from complete or incomplete combustion of this material may include carbon dioxide, carbon monoxide, water vapour, oxides of nitrogen, hydrogen chloride or a wide variety of innocuous or toxic fumes. Solvent vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along ground to sources of ignition.
<b>Extinguishing Media Unsuitable</b>	Water fog, foam, dry chemical, carbon dioxide
<b>Extinguishing Media</b>	Do not use a water jet.
<b>Precautions for Fire fighters</b>	Wear full protective equipment, including self contained breathing apparatus.
<b>Additional Advice</b>	Keep adjacent containers cool by spraying with water.

<b>6 ACCIDENTAL RELEASE MEASURES</b>
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<b>Small Spills</b>	Extinguish all ignition sources. Avoid sparks, flames and heat. Avoid accidents and clean up immediately. Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (rag or paper towels). Collect and seal in properly labelled containers or drums for disposal or recycling.
<b>Large Spills</b>	Extinguish all ignition sources. Avoid sparks, flames, heat and the build up of static electricity. Consider evacuation of area and/or site. Alert Emergency

Services if required. Slippery when spilt. Avoid accidents and clean up immediately. Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours by wearing appropriate respirator. Contain spill to prevent run off into drains and waterways. Use absorbent (rags, soil, sand, or other inert material). Collect using spark-free shovels (ie. plastic) and seal in properly labelled containers or drums for disposal or recycling. See Disposal section of this SDS for further details.

## 7 HANDLING AND STORAGE

- Handling** Avoid breathing of or contact with material. Use only in well ventilated areas. Keep away from heat, sparks, open flames and any other sources of ignition. Static electricity must be avoided. Wear the appropriate personal protection equipment as specified in this SDS to prevent eye and skin contact. Wash thoroughly after handling.
- Storage** Store in a cool, dry, well ventilated place and out of direct sunlight. Keep away from heat, sparks, open flames and any other sources of ignition. Static electricity must be avoided. Store away from any incompatible materials as defined in Section 10 of this SDS. Keep containers closed when not in use. Check regularly for leaks. For unit sizes of 20 litres or more, store according to HSNO.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Workplace Exposure Guidelines

Substance	WES-TWA	WES-STEL
Methyl Ethyl Ketone (2-Butanone)	150 ppm	300 ppm
Tetrahydrofuran-	100 ppm	-

**Engineering Controls** Use in a well ventilated area only. Vapour is heavier than air. Prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected. Keep containers in a well ventilated area. Explosion proof general and local exhaust ventilation system is required.

**Personal Protection Equipment** Avoid fume inhalation. Wear organic vapour respirator, especially if working in a poorly ventilated area. Selection of the correct cartridge is essential. Avoid skin contact. Avoid repeated and prolonged skin contact. Wear overalls or similar protective clothing. Wear solvent resistant gloves, and enclosed footwear. Avoid eye contact. Wear safety glasses, goggles or appropriate face shield.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Coloured thixotropic paste  
**Odour** Strong solvent

<b>Flash Point °C</b>	-6
<b>Boiling Point °C</b>	66 – 80
<b>Lower &amp; Upper Flammability Limits %</b>	1.9 – 11.5
<b>Auto-ignition Temperature °C</b>	Not determined
<b>Percent Volatile by weight</b>	45 – 55
<b>Specific Gravity</b>	1.4 ± 0.2
<b>Solubility in Water</b>	Medium

High = >60%    Medium = 10% - 60%    Low = 1% - 10%    Very Low = < 1%

## 10 STABILITY AND REACTIVITY

<b>Stability of Substance</b>	This material is stable when stored and used as directed.
<b>Conditions to Avoid</b>	Avoid heat, sparks, flames and any other sources of ignition.
<b>Incompatible Materials</b>	Strong oxidising agents.
<b>Hazardous Decomposition Products</b>	Thermal decomposition is highly dependant on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide, hydrogen chloride and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.
<b>Hazardous Reactions</b>	Will react with strong oxidising agents.

## 11 TOXICOLOGICAL INFORMATION

Information given in this Safety Data Sheet is based on EPA guidelines for mixtures

No adverse health effects are expected if the product is handled in accordance with this SDS and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

<b>Acute Oral Toxicity</b>	May be harmful if swallowed
<b>Acute Inhalation Toxicity</b>	Not considered toxic by inhalation
<b>Skin Irritation</b>	Causes skin irritation.
<b>Eye Irritation</b>	Causes serious eye irritation.
<b>Sensitisation (Respiratory &amp; Contact)</b>	Not expected to be a sensitiser.
<b>Carcinogenicity</b>	Suspected of causing cancer.
<b>Reproductive / Developmental Toxicity</b>	Not expected to cause damage to fertility or the unborn child.
<b>Mutagenicity</b>	Not expected to be mutagenic.
<b>Target Organ Systemic</b>	May cause damage to organs through prolonged or repeated exposure.

**12 ECOLOGICAL INFORMATION**
**Acute Toxicity**

<b>Aquatic</b>	Harmful to aquatic life.
<b>Soil</b>	Not harmful in the soil environment.
<b>Terrestrial Vertebrate</b>	Not harmful to terrestrial vertebrates.
<b>Terrestrial Invertebrate</b>	Ecotoxic to terrestrial invertebrates.

**Persistence & degradability**

The solvent in this product is readily biodegradable. The remainder of the product is expected to biodegrade slowly.

**Bioaccumulation**

No data available on the product itself, however the individual components do not bioaccumulate.

**Mobility**

Partially miscible with water. Heavier than water.

**13 DISPOSAL CONSIDERATIONS**
**Substance Disposal**

Do not let this product enter the environment. Do not dispose of down drains or into local waterways. Recycle or recover whenever possible. Dispose of substance to a hazardous or special waste collection point or through a licensed contractor. Normally suitable for incineration by an approved agent.

**Container Disposal**

Recycle if possible, or dispose of to a hazardous or special waste collection point. Beware: Empty flammable liquid drums present an explosion hazard if cut by flame or welding torch. Ensure drums are thoroughly cleaned and ventilated.

**Local Legislation**

Disposal should be in accordance with Hazardous Substances (Disposal) Regulations 2001, and with any other applicable regional and national laws and regulations.

**14 TRANSPORT INFORMATION**
**Land Transport (NZS 5433 Transport of Dangerous Goods on Land)**

<b>UN Number</b>	1133
<b>Proper Shipping Name</b>	ADHESIVES containing flammable liquid
<b>DG Class</b>	3
<b>Subsidiary Risk</b>	Not applicable
<b>Packing Group</b>	II
<b>HAZCHEM Code</b>	3[Y]E

**Marine Transport (IMDG)**

<b>Identification Number</b>	1133
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**Proper Shipping Name** ADHESIVES containing flammable liquid  
**Class / Division** 3  
**Packing Group** II  
**Marine Pollutant** No

**Air Transport (IATA)**

**UN Number** 1133  
**Proper Shipping Name** ADHESIVES containing flammable liquid  
**Class / Division** 3  
**Packing Group** II

**15 REGULATORY INFORMATION**

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

**Environmental Risk Management Authority (ERMA) Group Standard Number:**  
Surface Coatings and Colourants (Flammable, Toxic [6.1]) Group Standard 2006  
HSR002667

**Hazardous Substances and New Organisms Act (HSNO):**

The following are trigger quantities for this substance by itself in a place.

**Approved Handler Test Certificate** 250 litres, when in containers > 5 litres  
500 litres, when in containers ≤ 5 litres  
**Tracking** Not applicable

**Australian Poisons Schedule**

S5: All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS)

**16 OTHER INFORMATION**

**SDS Revisions** Safety Data Sheets are updated at least every 5 years. Obtain the latest version by visiting [www.bostik.co.nz](http://www.bostik.co.nz).  
**Reason for Issue** Update classification based on EPA guidelines  
**SDS Distribution** The information in this document should be made available to all who may handle this product.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use the product in the workplace. Since Bostik New Zealand Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact Bostik New Zealand Limited.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is available upon request.

**Key / Legend**

<b>SDS</b>	Safety Data Sheet
<b>HSNO</b>	Hazardous Substances and New Organisms Act 1996
<b>WES-TWA</b>	The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.
<b>WES-STEL</b>	The 15 minute average exposure standard. This applies to any 15 minute period in a 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 WES-TWA; both the short-term and time-weighted average exposures apply.

**Disclaimer** This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.