

# BORAL ASPHALT Safety Data Sheet



www.boral.com.au

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** C.E.1  
**Synonym(s)** CATIONIC EMULSION COATING

### 1.2 Uses and uses advised against

**Use(s)** REFRIGERATION PIPE PROTECTOR  
This product is applied by brush without heating.

### 1.3 Details of the supplier of the safety data sheet

**Supplier name** BORAL ASPHALT  
**Address** Level 3, 40 Mount Street, Nth Sydney, NSW, 2060, AUSTRALIA  
**Telephone** (02) 9220 6300  
**Email** [sds@rmt.com.au](mailto:sds@rmt.com.au)  
**Website** [www.boral.com.au](http://www.boral.com.au)

### 1.4 Emergency telephone number(s)

**Emergency** 1800 555 477 (8am – 5pm WST)  
**Emergency (A/H)** 13 11 26 (Poisons Information Centre)

## 2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA  
NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

### 2.1 Classification of the substance or mixture

**GHS classifications** Skin Corrosion/Irritation: Category 3

### 2.2 Label elements

**Signal word** WARNING  
**Pictograms** None allocated.  
**Hazard Statement(s)**  
H316 Causes mild skin irritation.  
**Prevention Statement(s)**  
P262 Do not get in eyes, on skin, or on clothing.  
**Response Statement(s)**  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
**Storage Statement(s)**  
P403 Store in a well-ventilated place.  
**Disposal Statement(s)**  
P501 Dispose of contents/container in accordance with relevant regulations.

### 2.3 Other hazards

This product is applied by brush without heating. Therefore, due to the application temperature the likelihood of asphalt fumes being released is reduced. Once cured, the inert solid material is considered non hazardous. Please see package labelling or manufacturer's literature for more detail on usage, handling, storage and disposal under different applications.

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

#### 3.1 Substances / Mixtures

Ingredient	Identification	Classification	Content
BITUMEN	CAS: 8052-42-4 EC: 232-490-9		60%
WATER	CAS: 7732-18-5 EC: 231-791-2		35%
EMULSIFIER(S)	Not Available		<2%

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

<b>Eye</b>	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
<b>Inhalation</b>	If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
<b>Ingestion</b>	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
<b>First aid facilities</b>	Eye wash facilities and safety shower are recommended.

#### 4.2 Most important symptoms and effects, both acute and delayed

Bitumens, occupational exposure to straight-run bitumens and their emissions during road paving, are classified as possibly carcinogenic to humans (IARC Group 2B). Once cured, the inert solid material is considered non hazardous.

#### 4.3 Immediate medical attention and special treatment needed

Burns caused by bitumen require special medical treatment. Consultation with a burns specialist experienced in bitumen burns is advisable in the first instance.

Refer to the Australian Asphalt Pavement Association (AAPA) bitumen burns card for further information (<http://www.aapa.asn.au>).

**Bitumen burns:** If hot bitumen contacts the skin, flush immediately with water and make no attempt to remove it. Use wet, cold towels if face, neck, shoulder or back etc are burnt. Cool burn areas for 30 minutes and seek immediate medical attention. Where bitumen completely circles a limb, it may have a tourniquet effect and should be split longitudinally as it cools. If eye burns result flush with water for 15 minutes, pad and seek immediate medical attention.

### 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

#### 5.2 Special hazards arising from the substance or mixture

**Non flammable.** May evolve toxic gases (carbon/ sulphur oxides, sulphides, hydrocarbons) when heated to decomposition.

#### 5.3 Advice for firefighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

#### 5.4 Hazchem code

None allocated.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in Section 8 of this SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

### 6.2 Environmental precautions

Contain material and prevent product from entering drains and waterways. Collect and seal in properly labelled containers for disposal. If contamination of sewers or waterways has occurred, contact local emergency services.

### 6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for disposal.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

### 7.3 Specific end use(s)

Not applicable.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Bitumen fume	SWA (AUS)	--	5	--	--

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Exposure controls

**Engineering Controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

#### PPE

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

**Eye / Face** Wear safety glasses or splash-proof goggles when handling material to avoid contact with eyes.

**Hand** Wear chemical resistant gloves (eg. neoprene or nitrile) when handling material to prevent skin contact.

**Body** Wear long sleeved shirt and full-length trousers.

**Respiratory** Where an inhalation risk exists in enclosed or partly enclosed environments (ie. underground car parks, large tanks, tunnels etc), wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator, dependent on a site specific risk assessment.



---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

### 9.1 Information on basic physical and chemical properties

Appearance	BROWN LIQUID (IN USE); BLACK SOLID THERMOPLASTIC MATERIAL (CURED)
Odour	BITUMEN-LIKE ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	100°C (Approximately)
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	< 4
Vapour density	NOT AVAILABLE
Specific gravity	NOT AVAILABLE
Solubility (water)	EMULSIFIES
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	> 300°C
Viscosity	NOT AVAILABLE
Explosive properties	NOT EXPLOSIVE
Oxidising properties	NON OXIDISING
Odour threshold	NOT AVAILABLE

### 9.2 Other information

Expected temp. when cured	Between ambient and 20°C above ambient
Avg weight when cured	1 Kg/L
Max temp. in use	Ambient to 70°C

---

## 10. STABILITY AND REACTIVITY

---

### 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

### 10.2 Chemical stability

Stable under recommended conditions of storage.

### 10.3 Possibility of hazardous reactions

Polymerization will not occur.

### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

### 10.5 Incompatible materials

Incompatible with oxidising agents (eg. hypochlorites) and acids (eg. nitric acid).

### 10.6 Hazardous decomposition products

May evolve toxic gases (carbon/ sulphur oxides, sulphides, hydrocarbons) when heated to decomposition.

---

## 11. TOXICOLOGICAL INFORMATION

---

### 11.1 Information on toxicological effects

Acute toxicity	No known toxicity data is available for this product. Based on available data, the classification criteria are not met. Inhalation may cause headache, nausea and respiratory tract irritation. Once cured, the inert solid material is considered non hazardous.
Skin	Classified as a mild skin irritant. Contact may result in mild irritation, drying and defatting of the skin, rash and dermatitis.
Eye	Not classified as an eye irritant. However, contact may result in mild irritation, lacrimation, pain and redness.

<b>Product name</b>	C.E.1
<b>Sensitization</b>	This product is not known to be a skin or respiratory sensitiser.
<b>Mutagenicity</b>	Insufficient data available to classify as a mutagen.
<b>Carcinogenicity</b>	Bitumens, occupational exposure to straight-run bitumens and their emissions during road paving, and to hard bitumens and their emissions during mastic asphalt work, are classified as possibly carcinogenic to humans (IARC Group 2B).
<b>Reproductive</b>	Insufficient data available to classify as a reproductive toxin.
<b>STOT – single exposure</b>	Not classified as causing organ effects from single exposure. However, inhalation of may cause headache, nausea and respiratory tract irritation.
<b>STOT – repeated exposure</b>	Not classified as causing organ effects from repeated exposure.
<b>Aspiration</b>	This product is not expected to present an aspiration hazard.

---

## 12. ECOLOGICAL INFORMATION

---

### 12.1 Toxicity

There is currently insufficient data to classify the ecotoxicity of this product. However, the bulk of the bitumen dispersed in asphalt is fairly inert when set, and should not present an environmental hazard under normal conditions.

### 12.2 Persistence and degradability

Can be expected to biodegrade slowly.

### 12.3 Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

### 12.4 Mobility in soil

Emulsifies in water.

### 12.6 Other adverse effects

Prevent contamination of drains or waterways.

---

## 13. DISPOSAL CONSIDERATIONS

---

### 13.1 Waste treatment methods

<b>Waste disposal</b>	For small amounts dispose of to an approved landfill site. Contact the manufacturer for additional information if larger amounts are involved. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

---

## 14. TRANSPORT INFORMATION

---

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b><u>14.1 UN number</u></b>	None Allocated	None Allocated	None Allocated
<b><u>14.2 UN proper shipping name</u></b>	None Allocated	None Allocated	None Allocated
<b><u>14.3 Transport hazard classes</u></b>			
<b>DG class / division</b>	None Allocated	None Allocated	None Allocated
<b>Subsidiary risk(s)</b>	None Allocated	None Allocated	None Allocated
<b><u>14.4 Packing group</u></b>	None Allocated	None Allocated	None Allocated
<b><u>14.5 Environmental hazards</u></b>	None Allocated		
<b><u>14.6 Special precautions for user</u></b>			
<b>Hazchem code</b>	None Allocated		

---

## 15. REGULATORY INFORMATION

---

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

<b>Poison schedule</b>	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
<b>Classifications</b>	None allocated.
<b>Risk phrases</b>	None allocated.
<b>Safety phrases</b>	None allocated.
<b>Inventory listing(s)</b>	<b>AUSTRALIA: AICS (Australian Inventory of Chemical Substances)</b> All components are listed on AICS, or exempt.

---

## 16. OTHER INFORMATION

---

<b>Abbreviations</b>	ACGIH - American Conference of Industrial Hygienists. ADG - Australian Dangerous Goods. BEI - Biological Exposure Indice(s). CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds. CNS - Central Nervous System. EC No - European Community Number. IARC - International Agency for Research on Cancer. mg/m3 - Milligrams per Cubic Metre. NOS - Not Otherwise Specified. pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). ppm - Parts Per Million. RTECS - Registry of Toxic Effects of Chemical Substances. STEL - Short Term Exposure Limit. STOT-RE - Specific target organ toxicity (repeated exposure) STOT-SE - Specific target organ toxicity (single exposure) SWA - Safe Work Australia. TWA - Time Weighted Average.
<b>Report status</b>	<p>This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').</p> <p>The information presented herein is based on data considered to be accurate as of the date of preparation of this SDS. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorisation given or implied to practice any patented invention without a licence. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, without a risk assessment for safe use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the products.</p> <p>This Safety Data Sheet (SDS) applies only to the formulated material as supplied by Boral Asphalt. It does not apply where the formulation has been altered. In this case a new SDS may be required to reflect the modified material. Contact Boral Asphalt for further information.</p> <p>Printed documents are uncontrolled. Refer to <a href="http://www.boral.com.au">www.boral.com.au</a> regularly for a more recent copy of the SDS where it exists.</p>
<b>Prepared by</b>	Risk Management Technologies 5 Ventnor Avenue, West Perth, Western Australia, 6005. Phone: +61 8 9322 1711 Facsimile: +61 8 9322 1794 Email: <a href="mailto:info@rmt.com.au">info@rmt.com.au</a> Web: <a href="http://www.rmt.com.au">www.rmt.com.au</a>
<b>Revision History</b>	Revision Number: v1.0 Description: Initial release

SDS Date: 29 October 2013

**End of Report**