

# Safety Data Sheet



## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** CATIONIC BITUMEN EMULSION  
**Synonyms** C.E.1, C.E.2 • CAT SPRAY EMULSION • CRS 60 • CRS 62 • CRS 65 • CRS/170 - 60

### 1.2 Uses and uses advised against

**Uses** ROAD MAINTENANCE • TACK COATING

### 1.3 Details of the supplier of the product

**Supplier name** BORAL AUSTRALIA  
**Address** Triniti T2, Level 3, 39 Delhi Road, North Ryde, NSW, 2113, AUSTRALIA  
**Telephone** (02) 9220 6300  
**Website** <http://www.boral.com.au>

### 1.4 Emergency telephone numbers

**Emergency** 13 11 26 (Poisons Information Centre)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

#### Physical Hazards

Not classified as a Physical Hazard

#### Health Hazards

Skin Corrosion/Irritation: Category 3

#### Environmental Hazards

Not classified as an Environmental Hazard

### 2.2 GHS Label elements

**Signal word** WARNING

#### Pictograms

#### Hazard statements

H316 Causes mild skin irritation.

#### Prevention statements

P262 Do not get in eyes, on skin, or on clothing.

#### Response statements

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

#### Storage statements

P403 Store in a well-ventilated place.

#### Disposal statements

P501 Dispose of contents/container in accordance with relevant regulations.

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### 2.3 Other hazards

This product is expected to be applied without heating, however can be heated up to 70°C to assist with application if sprayed. Avoid direct contact with heated material. 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.

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## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

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### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
WATER	7732-18-5	231-791-2	35 to 75%
ASPHALT	8052-42-4	232-490-9	30 to 65%
EMULSIFIER(S)	-	-	<2%

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## 4. FIRST AID MEASURES

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### 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 Poisons 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

May be harmful. Use safe work practices to avoid eye or skin contact and inhalation. 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.

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## 5. FIRE FIGHTING MEASURES

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### 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.

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## 6. ACCIDENTAL RELEASE MEASURES

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

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

### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

### 6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

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## 7. HANDLING AND STORAGE

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### 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 uses

Not applicable.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### 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 fume 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.

**Hands** 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.



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Information on basic physical and chemical properties

**Appearance** BROWN LIQUID (IN USE); BLACK SEMI-SOLID THERMOPLASTIC MATERIAL (WHEN

## PRODUCT NAME CATIONIC BITUMEN EMULSION

### 9.1 Information on basic physical and chemical properties

	CURED)
Odour	BITUMEN-LIKE ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	100°C
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	< 4
Vapour density	NOT AVAILABLE
Relative density	1.05
Solubility (water)	INSOLUBLE
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 AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

### 9.2 Other information

Avg weight/m <sup>2</sup> when cured	1 kg/m <sup>2</sup>
Expected temp. when cured	Between ambient and 20°C above ambient
Max temp. in use	Ambient to 70°C

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## 10. STABILITY AND REACTIVITY

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### 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 (e.g. hypochlorites) and acids (e.g. nitric acid).

### 10.6 Hazardous decomposition products

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

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## 11. TOXICOLOGICAL INFORMATION

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### 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	Causes mild skin irritation. Contact may result in mild irritation, drying and defatting of the skin, rash and dermatitis.
Eye	Not classified as an eye irritant. However, direct contact may result in mild irritation, lacrimation, pain and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Insufficient data available to classify as a mutagen.
Carcinogenicity	Bitumens, occupational exposure to straight-run bitumens and their emissions during road paving, and hard bitumens and their emissions during mastic asphalt work, are classified as possibly carcinogenic to humans (IARC Group 2B).

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<b>Reproductive</b>	Insufficient data available to classify as a reproductive toxin.
<b>STOT - single exposure</b>	Not classified as causing organ damage from single exposure. However, high level exposure may result in headache, nausea and respiratory tract irritation.
<b>STOT - repeated exposure</b>	Not classified as causing organ damage from repeated exposure.
<b>Aspiration</b>	Not expected to present an aspiration hazard.

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**12. ECOLOGICAL INFORMATION**

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**12.1 Toxicity**

There is currently insufficient data to classify the ecotoxicity of this product.

**12.2 Persistence and degradability**

Can be expected to biodegrade slowly.

**12.3 Bioaccumulative potential**

This product is not expected to bioaccumulate.

**12.4 Mobility in soil**

Emulsifies in water.

**12.5 Other adverse effects**

Avoid uncured emulsion run off into storm water drainage system.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

**Waste disposal** For small amounts, dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information if disposing of large quantities (if required). Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

**Legislation** Dispose of in accordance with relevant local legislation.

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**14. TRANSPORT INFORMATION**

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**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>14.1 UN Number</b>	None allocated.	None allocated.	None allocated.
<b>14.2 Proper Shipping Name</b>	None allocated.	None allocated.	None allocated.
<b>14.3 Transport hazard class</b>	None allocated.	None allocated.	None allocated.
<b>14.4 Packing Group</b>	None allocated.	None allocated.	None allocated.

**14.5 Environmental hazards**

No information provided.

**14.6 Special precautions for user**

**Hazchem code** None allocated.

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**15. REGULATORY INFORMATION**

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

**Poison schedule** 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).

**Classifications** Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

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**Inventory listings** **AUSTRALIA: AIC (Australian Inventory of Industrial Chemicals)**  
All components are listed on AIC, or are exempt.

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**16. OTHER INFORMATION**

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**Additional information****PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

**Report status**

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').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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