

INSTANT**BITUMEN**

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MATERIAL SAFETY DATA SHEET **BONDING AGENT**

PRODUCT: **CRS**

NOTE: PRODUCT NOT TO BE HEATED.

1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CRS CATIONIC EMULSION

SUPPLIER: INSTANT BITUMEN
A.C.N. 008 428 979
9 C.B. Fisher Drive,
Cavan South Australia 5094

PRODUCT INFORMATION: PH: 61 8 8359 7777 FAX: 61 8 8359 4011

USE OR DESCRIPTION: Bitumen emulsion for road surfacing applications.

2 COMPOSITION / INFORMATION ON INGREDIENTS

GENERIC COMPOSITION:

INDGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

| SUBSTANCE NAME | WT % | EU CLASSIFICATION |
|--|-------|--------------------------|
| Bitumen (Petroleum) (8052-42-4) | 30-40 | N/A |
| Oxidised Bitumen (Petroleum) (64742-93-4) | 20-30 | N/A |
| Hydrochloride salt solution | 30-40 | Xi ; R36/38 |
| Kerosene (8008-20-6) | 1-5 | R10 Xn;R22 Xi;R38 R52/53 |

Notes: EC Symbols: N/A not applicable, Xi irritant, Xn harmful

3 HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE: Eye irritation. Skin irritation. Swallowing may result in severe gastrointestinal irritation. Respiratory irritation from excessive breathing of mists and or vapours.

4 FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water for at least 15 minutes. Obtain medical attention immediately.

SKIN CONTACT: Dry wipe the skin. Cleanse the contact area with waterless handcleaner or soap and water as soon as practicable. Remove contaminated clothing and launder before re-use. Discard shoes if the material has penetrated to the inside surface.

INHALATION: Remove the victim from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs seek immediate medical assistance and call an ambulance. If breathing has ceased use mouth to mouth resuscitation.

INGESTION: Do not induce vomiting. Give 1 to 2 glasses of water. Obtain medical attention or call an ambulance.

NOTE TO PHYSICIANS: Treat symptoms with reference to specific health effects identified above.

5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry Chemical, Foam, CO₂.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing. Use water to cool fire exposed containers. Water spray may be used to flush spills away from exposures. Prevent run off from fire control or dilution from entering waterways, sewers or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed area, firefighters must use self-contained breathing apparatus.

USUSUAL FIRE and EXPLOSION HAZARDS: Exposure to fire can generate toxic fumes. Flash point C (F) = 150 (302) (IP 36/ ASTM D-92). Flammable limits - LEL NA, UEL NA.

NEPA HAZARD ID: HEALTH : 2, FLAMMABILITY : 1, REACTIVITY : 0

HAZARDOUS DECOMPOSTION PRODUCTS: Carbon Monoxide, HCl, Sulphur Oxides and H₂S.

6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report large spills as required to appropriate authorities such as the local environmental health officer or Fire Brigade. If spills are likely to enter any drain, waterway or groundwater, contact the area water Authority. In case of accident on road spill, contact the Police and Fire Brigade and, if appropriate the Area Water Authority.

PROCEDURE IF MATERIAL IS RELEASED OR SPILLED: For large spills: Contain the material and pump back to holding tank for later disposal. Absorb onto an inert oil binding material such as silica gel, sawdust or sand. Shovel into suitable,

labelled containers. Dispose of at an appropriate licensed waste disposal site in accordance with current applicable laws and regulations and product characteristics at the time of disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and from contact with soil.

PERSONAL PRECAUTIONS: See section 8.

7 HANDLING AND STORAGE

HANDLING: Avoid contact with the eyes. Avoid contact with skin. Wash thoroughly after handling. Irritation may occur if the product is not removed from the skin. Avoid inhalation of the vapours or mists.

STORAGE: Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material. See section 15 for Regulatory information when storing this product.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION: Use in well ventilated area.

RESPIRATORY PROTECTION: No special requirements under ordinary conditions of use and with adequate ventilation. Approved respiratory protective equipment must be used when vapours or mist concentrations exceed applicable standards.

EYE PROTECTION: Chemical type goggles should be worn if contact may occur.

SKIN PROTECTION: Impervious gloves should be worn if contact may occur.

Protective and sensible work clothing must be worn ie: long sleeved/legged overalls, long sleeved shirts and pants and closed toed safety boots.

OTHER: Avoid prolonged, repeated skin contact and breathing mists or vapours.

EXPOSURE LIMITS

| Substance name (CAS-No) | Source | TWA (ppm, mg/m3) |
|--|--------|------------------|
| Bitumens (petroleum) (8052-42-4), FUMES | WNES | 5 |
| Bitumens (petroleum) (64742-93-4), FUMES | WNES | 5 |

WNES = Worksafe Australia National Exposure Standard.

Note: Limits shown for guidance only. Follow applicable regulations.

9 PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties and given below. Consult the Product Data sheet for specific details.

Physical state: Emulsion
Odour: Mild
pH: 2.5
Melting point: 0° C

Colour: Brown
Odour Threshold: N/A
Boiling point: 100° C
Flammability: N/A

Auto flammability: N/A
Oxidising Properties: N/A
Vapour density: N/A
Relative Density: 1.02
Viscosity at 40° C: - 25 cps
Pour Point: < 5° C

Explosive Properties: N/A
Vapour Pressure: 17mm Hg (20° C)
Evaporation Rate: N/A
Solubility in Water: Emulsifies
Viscosity at 100° C : 5cps
Freezing Point: 0° C

N/A = Not Applicable

10 STABILITY AND REACTIVITY

STABILITY (Thermal, light, etc): Stable

CONDITIONS TO AVOID: Extreme heat

INCOMPATIBILITY: Strong oxidisers

HAZARDOUS DECOMPOSITION PRODUCTS: CO, HCl, H₂S and Sulfur Oxides.

HAZARDOUS POLYMERISATION: Will not occur.

11 TOXICOLOGICAL DATA

ORAL TOXICITY: Practically non-toxic (LD50 is greater than 2000 mg/k – based on testing of similar products and/or the components).

DERMAL TOXICITY: Practically non-toxic –(based on testing of similar products and/or the components).

INHALATION TOXICITY: Not established

EYE IRRITATION: Irritant (Draize score > 15 but less than 35 – based on testing of similar products).

SKIN IRRITATION: Irritant. (Primary irritation index ≥ 3 but less than 5 – based on testing of similar products and/or their components).

OTHER TOXICOLOGICAL DATA

Some bitumens may contain polycyclic aromatic compounds (PAC's). The exposure standard of 5mg/m³ is believed to be adequate to protect workers exposed to bitumen fumes.

12 ECOLOGICAL INFORMATION

Environmental fate and effects have not been established.

13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: The product is suitable for processing by an approved recycling facility or can be disposed of at any licensed waste disposal site. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at any time.

14 TRANSPORT INFORMATION

ACTDG: Not regulated by ACTDG
RID/ADR: Not regulated by RID/ADR
IMO: Not regulated by IMO
IATA: Not regulated by IATA

15 REGULATORY INFORMATION

Governmental Inventory Status: All components comply with Australian AICS.

AUSTRALIAN CLASSIFICATIONS:

- 1 UN NUMBER: N/A
- 2 HAZCHEM Code: N/A
- 3 Dangerous Goods Class/Subsidiary Risk: N/A
- 4 Packaging Class: N/A
- 5 AS1940 Class: N/A
- 6 POISONS SCHEDULE: N/A
- 7 WORKSAFE CLASSIFICATION: Irritant by Worksafe criteria

N/A = Not Applicable

EC LABELLING

Symbol: Xi Irritant

Risk Phrase(s): R36/38 Irritant to eyes and skin.

Safety Phrases: S2-24/25-37/39-26. Keep out of the reach of children. Avoid contact with skin and eyes. Wear suitable gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

CONTAINS: Hydrochloride salts, kerosene

The following Product Ingredients are cited on the lists below:

| CHEMICAL NAME | CAS NUMBER | LIST CITATIONS |
|---------------------|------------|----------------|
| Bitumen, unoxidised | 8052-42-4 | 6 |
| Bitumen, oxidised | 64742-93-4 | 3,6 |

Regulatory Lists Searched

1=IARC 1 2=IARC 2 3=IARC 2B 4=NTP CARC
5=NTP SUS 6=ACGIH

CARC=Carcinogen SUS=Suspected Carcinogen TERAT=Teratogenic

16 OTHER INFORMATION

This MSDS meets Worksafe Australia accepted format requirements.

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user. We DISCLAIM ALL WARRANTIES OF EVERY KIND and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product. Nothing is intended as a recommendation for uses which infringe valid patents or as extending licence under valid patents. Appropriate warnings and safe-handling procedures should be provided to handlers and users.

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