



# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT IDENTIFICATION AND USE

Product Identifier:	CBR PLUS North American Blend
CAS No.	None: Compound
MSDS Number	*8.25.00
Molecular Weight:	350
Product Group:	Surfactant
Chemical Name:	Organic Sulphonic Acid Derivatives
Chemical Family:	Organic acid solution in water
Chemical Formula:	R – SO <sub>3</sub> H where R is a Hydrocarbon
Product Use:	As a soil stabiliser and dust suppressant at high dilution in water
WHMIS Classification:	Not Classified
NFPA Hazard Ratings:	Fire: NV    Toxicity: NV    Reactivity: NV    Special: NV



## 2. HAZARDOUS INGREDIENTS

CBR Plus:

Material/ Component: The main active ingredient is an organic sulphonate.

Hazardous Ingredient: None

% Ratio: None

CAS No: The CAS Numbers of all components of this compound appear on the Canadian Domestic Substances List, and on the USEPA Toxic Substances List. The product is not considered toxic or hazardous.

## 3. PHYSICAL DATA

Appearance: Red Carmin / Chocolate Brown viscous fluid

Odour: Slight Sulphurous Odour

Physical State: Viscous Fluid

Freezing Point(C): ~10°C

Boiling Pint (C): 100°C

Odour Threshold: Ambient

Vapour Pressure: 20 mm Hg

Vapour Density: +1.0 (air = 1)

Percent Volatile: 73% by vol.

Evaporation Rate: As for water

pH: 0,09

Specific Gravity: 1.00

Coefficient Water/Oil: 100% water soluble

Percent Soluble (@20C): 100%

Others: Anion active 18% minimum (hyamine method).

## 4. FIRE AND EXPLOSION DATA

Flammability: NO Non-flammable

Extinguishing Media: N/AP

Special Fire Fighting Procedures: N/AP

Unusual Fire and Explosion Hazards: In fire situation, drums may burst. Hot liquid is corrosive.

Flashpoint (°C): None

Method: OPEN CUP

Upper Flammable Limit (%vol.): N/AP

Lower Flammable Limit (% vol.): N/AP

Auto-Ignition Temp (°C): N/AP

Hazardous Combustion Products: In fire situation may give sulphur oxide fumes.

Explosion – Sensitivities to Impact: Non-explosive. Not sensitive to impact.

Explosion – Sensitivity to Static Discharge: Non-explosive. Not sensitive to static discharge.



## 5. REACTIVITY DATA

Chemical Stability:	Yes. Stable
Incompatibility with Other Substances:	Yes. Alkalies and oxidising agents
Other Reactivity Concerns:	No. None
Hazardous Polymerisation:	No. Will not occur.
Hazardous Decomposition Products:	In fire may give sulphur acid fumes – irritants.

## 6. TOXICOLOGICAL EFFECTS

Acute Exposure:	May cause skin irritation under long exposure. Will cause eye irritation with liquid contact.
Chronic Exposure:	N/AV
Exposure Limits:	
ACGIH TLV:	500ppm in air
Others:	Exposure Limit (ACC TLV) for Sulphonic Acid: 500 ppm in air.
Carcinogen by NTP:	Non-carcinogenic
OSHA Controlled:	No
Irritancy:	May cause skin irritation under long exposure: Will cause eye irritation with liquid contact.
Sensitisation:	Low by test on guinea pigs.
Carcinogenicity:	No. Non-carcinogenic by SACS hazardous material source.
Synergistic Products:	None known

## 7. PREVENTIVE MEASURES

### Personal Protective Equipment:

Gloves:	Rubber for concentrate
Respirator:	Not required
Eye	Face shield for concentrate
Other:	Not required.
Engineering Controls:	VENTILATION; Local exhaust: not required Mechanical (general): not required.
Leak and Spill Procedure:	Product is biodegradable. Spray copiously with water and wash to drain as dilute solution
Waste Disposal:	Not required – biodegradable as dilute solution
Handling Procedures and Equipment:	Avoid contact with foodstuffs Avoid contact with skin.
Storage Requirements:	Store in cool place. Keep drum sealed when not in use. Do not store below 0°C / 32°F.
Special Shipping Info:	None. (Non Dangerous Goods) Non-Corrosive

## 8. FIRST AID MEASURES

First Aid Measures:	Avoid contact with skin. Wash soonest with copious water. For eye contact, if irritation persists after washing, seek medical aid. For ingestion, seek medical aid
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## 9. ENVIRONMENTAL EFFECTS:

Summary:	A study evaluated the acute toxicity of the material, CBR PLUS, and the leachate of soil samples treated with CBR PLUS to Rainbow trout, Daphnia Magna and Microtox. For the actual concentration of CBR PLUS (at its normal dilution for application of 1.5 to 3 mg/L) to be used in the field, and the leachate water for all tests proved to be non-toxic.
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#### 10. REFERENCES:

References: Brussels Nomenclature: 3402/11/20  
(For customs purposes)

#### 11. COMMENTS:

Comments: contains no dioxins, furans, known carcinogens or any agent likely to create a pollution problem in the field of use.

#### 12. PREPARATION DATE OF MSDS

Original Preparation by: Managing Director  
**Agent CBR PLUS Technologies International (Pty) Ltd.** Date: 00/11/20

**NOTE:** This product safety data applies to the **CONCENTRATED PRODUCT ONLY**. CBR PLUS, when diluted for application is no more harmful than water. **This data does not apply when diluted product is used.** The data contained in this MSDS is based on data, which is considered to be accurate. However there is no guarantee of warranty, either expressed or implied of the accuracy or completeness of this information. Any loss incurred during storage, handling, transportation, use or disposal is expressly disclaimed.

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