



GRAVELOCK
Soil Consolidation Aid

MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY

Product Identifier: GRAVELOCK

Manufacturer's Name: Agent CBR Plus Technologies International (Pty) Ltd
Plot No. 23 Vieira Street
Amorosa,
Gauteng South Africa
P O Box 6673
Westgate, 1734 South Africa

Emergency Telephone/Cell Number: 604-512-8634

Supplier Identifier: Agent CBR Plus Technologies International (Pty) Ltd
Plot No. 23 Vieira Street
Amorosa,
Gauteng South Africa
P O Box 6673
Westgate, 1734 South Africa

Emergency Telephone/Cell Number: 604-512-8634

Product Use: As a soil stabiliser and dust suppressant at high dilution in water

Name of Party Responsible For The preparation of the MSDS: J J Grabe, Managing Director
Agent CBR PLUS Tech Int. (Pty) Ltd. Phone: (27 11) 958-1940 Date: May 23, 2014

Date of Preparation of MSDS: 14 JANUARY 2010

2. COMPOSITION/INFORMATION ON INGREDIENTS

MSDS Number: GRAVELOCK

Molecular Weight: 580

Product Group: Surfactant

Chemical Name: Sulphonic Acid Derivatives

Chemical Family: Organic acid solution in water

Chemical Formula: R – SO₃H where R is a Hydrocarbon

CAS No: None: Compound

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

Hazardous Ingredient: None

% Ratio: None

Chemical Name: The CAS Numbers of all components of this compound appear on the Canadian Domestic Substances List, but not on the USEPA Toxic Substances List. This means that the product is not considered toxic or hazardous.

WHMIS Classification: Not Classified

NFPA Hazard Ratings: Fire: NV Toxicity: NV Reactivity: NV Special: NV

3. HAZARDS IDENTIFICATION

Emergency Overview:

Potential Health Effects:

Effects of Acute Exposure: May cause skin irritation under long exposure. Will cause eye irritation with liquid contact.

Effects of Chronic Exposure: None

4. 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

5. FIRE FIGHTING MEASURES

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.

6. ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedure: Product is biodegradable
Spray copiously with water and wash to drain as dilute solution

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: VENTILATION; Local exhaust: not required Mechanical (general): not required.

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.

Personal Protective Equipment:

Gloves: Rubber for concentrate

Respirator: Not required

Eye Face shield for concentrate
Other: Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red viscous fluid
Odour: Sulphurous Odour
Physical State: Viscous Fluid
Freezing Point(C): <-10°C
Boiling Point (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: 0,9
Specific Gravity: 0.94
Coeff Water/Oil: 100% water soluble
Percent Soluble (@20C): 100%
Others: Anion active 24% minimum (hyamine method).

10. 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.

11. TOXICOLOGICAL EFFECTS

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

12. ECOLOGICAL INFORMATION

Summary: A study evaluated the acute toxicity of the material, GRAVELOCK, and the leachate of soil samples treated with GRAVELOCK to Rainbow trout, Daphnia Magna and Microtox.
For the actual concentration of GRAVELOCK (at its normal dilution for application of 0.5 to 1.0 mg/L) to be used in the field, and the leachate water for all tests proved to be non-toxic.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Not required – biodegradable as dilute solution

14. SHIPPING INFORMATION

Special Shipping Info: None. (Non Dangerous Goods) Non-Corrosive

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

16. OTHER INFORMATION:

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

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

NOTE: This product safety data applies to the CONCENTRATED PRODUCT ONLY. GRAVELOCK, when diluted for application is no more harmful than water. This data does not apply when diluted product is used. The data contained in the MSDS is based on data, which is considered to be accurate. However, there is no guarantee or 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.



MANUFACTURER:

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