



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

- 1.1 Commercial product name: Retain**
Product group: substrate enhancer
- 1.2 Use of the substance/preparation**
Substrate enhancer with water and nutrient storing capacity, based on rock flour and organic super absorbent
- 1.3 Information manufacturer/supplier**
RainSoil
6960 W. Warm Springs Rd., Ste. 110
Las Vegas, NV 89113 - USA
Phone: (702) 986-5167
www.rainsoil.com
- 1.4 Emergency telephone**
24 Hour Emergency Number – CHEMTREC (USA) – 1-800-424-9300

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

- 2.1 Chemical characterization**
Composite material consisting of rock flours, sand, water and polyacrylate
- 2.2 Hazardous components**
None

SECTION 3: HAZARDS IDENTIFICATION

- 3.1 Classification**
Symbols : None
R-phrases : None
S-phrases : None
- 3.2 Explication of special hazards for human health and environment**
None

SECTION 4: FIRST AID MEASURES

- 4.1 General information**
None
- 4.2 After inhalation**
Not applicable, solid granulate
- 4.3 After contact with skin**
Harmless, wash off with soap and warm water.
- 4.4 After contact with eyes**
In the case of contact with eyes, rinse with plenty of water. If eye irritation persists, contact a doctor
- 4.5 After ingestion**
Remove from exposure, lie down. If large amount was swallowed, seek medical advice immediately, due to the strong water absorption and expansion of the material.
Product is inert and nontoxic.

**SECTION 5: FIRE-FIGHTING MEASURES**

- 5.1 Suitable extinguishing media**
Product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 5.2 Extinguishing media that must not be used for safety reasons**
None known.
- 5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**
None. CO, CO₂ and other organic substances may be released in a fire. Take usual precautionary measures as in any fire fighting situation.
- 5.4 Special protective equipment for firefighters**
No special technical protective measures required.
- 5.5 Additional information**
No special protective measures against fire required

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions**
No personal protective equipment required.
- 6.2 Environmental precautions**
None.
- 6.3 Methods for cleaning up/taking up**
Take up mechanically and collect in suitable container for disposal. Do not use water because of the swelling capacities of the material.

SECTION 7: HANDLING AND STORAGE

- 7.1 Handling**
Advice on safe handling
Handle with care and observe the label instructions.
Use gloves for mechanical protection.
- 7.2 Storage**
Requirements for storage rooms and vessels
Keep containers closed, protect from direct sunlight and heat. Store at room temperature (ideally between 5 and 30 degrees Celsius) in the original containments, humidity should be avoided. Freezing will affect the physical condition but will not damage the material.
Advice on protection against fire and explosion
No special handling advice required.
Further information on storage conditions
Keep containments closed.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

- 8.1 Exposure limit values**
Exposure limits (EH40)
None
- 8.2 Exposure controls**
Protective and hygiene measures
Avoid contact with skin, eyes. Wear suitable gloves and eye protection. Keep away from food, drink and animal feeding stuffs. When using do not eat or drink.
Respiratory protection
Not required under normal use. Under poor ventilation, use respiratory equipment with P2 filter.
Hand protection
Gloves for mechanical protection
Eye protection
Not required under normal use
Body protection
Not required under normal use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Appearance**
Form: solid
Color: reddish brown
Odor: neutral to slightly acidic
- 9.2 Important health, safety and environmental information**
Test method
pH Value 5.3-6.0 (at 20 °C)
Changes in the physical state
Boiling point: not applicable.
Sublimation point: not applicable.
Softening point: 80 °C
Stock point: not applicable
Thermal defragmentation: >200 °C
Flash point: >300 °C, dried product, no self-inflaming potential
Explosion Limits: not applicable
Autoignition temperature: no autoinflammation potential
Vapor pressure: not applicable
Water solubility: insoluble
Expands up to 3000% through uptake of water.

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Materials to avoid**
None.
Hazardous decomposition products
No decomposition if stored and applied as directed.

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity:** None. (LD50 oral rat:>2000mg/kg)
Specific effects in experiment on an animal: None known.
Irritancy and corrosiveness: None known.
Sensitizing effect: None known.
Inhalation: None known.
Sub acute, sub chronic and prolonged toxicity: None known.
Carcinogenicity, mutagenicity and reproductive toxicity: None known.
Additional information on tests: No persistent or cumulative effects were observed.
Empirical data on effects on humans: No exceptional reactions have been observed, Retain can be classified as toxicological harmless.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity:**
Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
Toxicity test on fish: *Brachydanio rerio* 2 cm, LC50 = 6.62 g/L (OECD 203), result: no toxicity
Toxicity test on Daphnia: *Daphnia magna* Straus, EC50 = 26.8 g/L / 48 h (OECD 202 and DIN EN ISO 6431), result: no toxicity
Toxicity test on Lightbacteria: *Vibrio fischeri*; EC20 = 44.2 g/L; EC50 = 53 g/L, (DIN EN ISO 11348-2), result: no toxicity
- Persistence and degradability:** 5%/28days (OECD 302 B), slow biodegradability
- Bioaccumulative potential:** Does not bioaccumulate. Ecological injuries are not known or expected under normal use.
- Other adverse effects:** None known.

SECTION 13: ADVICE ON DISPOSAL

- 13.1 Product:** Dispose of product in accordance with local/national regulations. Do not allow waste disposal through drains or watercourses
- 13.2 Packaging:** Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

- 14.1 Land transport (ADR/RID)**
Warnings plate : None.
Description of the goods: Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR
- 14.2 Inland waterways transport**
Description of the goods: Not dangerous goods
- 14.3 Marine transport**
Description of the goods: Not dangerous goods
- 14.4 Air transport**
Description of the goods: Not dangerous goods



SECTION 15: REGULATORY INFORMATION

15.1 Labeling

Indication of danger

None.

Labeling according to EC-guidelines

None.

R phrases

None.

S phrases

None.

15.2 National regulations

Statutory order on hazardous incidents: not mentioned in appendix II

VBF Classification: not applicable

TA- Air regulations: not applicable

Water contaminating class: not water contaminating

SECTION 16: OTHER INFORMATION

Other data

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contractual legal rights. The receiver of our product is singularly responsible for adhering to pertaining laws and regulations.