



Molecule [HS] Hardscape Shampoo

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TechniSoil Global Inc. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: Molecule [HS] Hardscape Shampoo

Recommended use of the chemical and restrictions on use

Identified uses: Cleaning and coatings product

COMPANY IDENTIFICATION

TechniSoil Global, Inc.
5660 Westside Road
Redding, CA, USA 96001

Customer Information Number

Toll Free: 877-356-2250

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 800-424-9300
Local Emergency Contact: 800-424-9300

2. HAZARD IDENTIFICATION

Health Hazards:

Acute toxicity, oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

Environmental Hazards:

Hazardous to the aquatic environment, acute hazard	Category 1
Hazardous to the aquatic environment, long-term hazard	Category 3

OSHA defined hazards: Not Classified

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant).

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Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (sensitizer).

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to upper respiratory tract, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage.

Signal Word: Warning

Hazard Statement: Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary Statement: Avoid breathing mist or vapor. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.

If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical nature: Polymers, water based. This product is a mixture

Sodium Carbonate	2.5 - 5%
Sodium Citrate	2.5 - 5%
Proprietary Polymer Blend	3 - 13%
Proprietary Polymer Blend	2 - 12%
Water	65 - 90%

4. FIRST AID MEASURES

Description of first aid measures

General advice: Seek medical treatment

Inhalation: Move person to fresh air; if effects occur, consult a physician. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before

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reuse. Thoroughly clean shoes before reuse. Get medical attention. Remove contaminated clothes immediately. Immediately wash with water and soap and rinse thoroughly. Consult a doctor in case of complaints.

Eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. Consult a doctor in case of complaints.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Hazardous combustion products: Formation of toxic gases is possible during heating or in case of fire.

Unusual Fire and Explosion Hazards:

Advice for firefighters

Fire Fighting Procedures: Move containers from fire area if you can do so without risk.

Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit. Do not inhale explosion gases or combustion gases. Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep people away from and upwind of spill/leak. Keep out unauthorized persons. Avoid contact with eyes and skin.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS

Environmental precautions: This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering

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sewage and drainage systems which lead to waterways. Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Methods and materials for containment and cleaning up: Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not taste or swallow. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas. Keep ignition sources away- Do not smoke.

Conditions for safe storage: Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.

Storage stability

Storage temperature: 1 - 38 °C (34 - 100 °F)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls

Biological limit values: No biological exposure limits noted for the ingredient(s).

Engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. It is recommended that users of this product perform a risk assessment to determine the appropriate PPE.

Individual protection measures

Eye/face protection: Use safety glasses (with side shields).

Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Styrene/butadiene rubber. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Avoid gloves made of:

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Neoprene. Polyvinyl alcohol ("PVA"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection: Use respiratory protective device with filters for organic and acid gas (or airline respirators in some cases), if the product is heated above 200°C and toxic gases is formed. Use respiratory protective device with organic gas cartridge.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Liquid
Color	Whitish
Odor	Slightly Sweetish
Odor Threshold	No data available
pH	6.2
Melting point/range	0 °C (32 °F) Water
Freezing point	No data available
Boiling point (760 mmHg)	100 °C (212 °F) Water
Flash point	Noncombustable
Evaporation Rate (Butyl Acetate = 1)	<1 Water
Flammability (solid, gas)	Not Applicable
Lower explosion limit	Not Applicable

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Upper explosion limit	Not Applicable
Vapor Pressure	No further information available.
Relative Vapor Density (air = 1)	<1 Water
Relative Density (water = 1)	1.07 - 1.17
Water solubility	Dilutable
Partition coefficient: n- octanol/water	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Dynamic Viscosity	5 - 125 mPa.s
Kinematic Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Molecular weight	No data available
Percent volatility	54 - 56 % Water

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Keep away from heat, sparks, flame, high temperature

Incompatible materials: There are no known materials which are incompatible with this product.

Hazardous decomposition products: Danger of toxic fluorine based pyrolysis products.

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11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity

(LD50): 4090 mg/kg [Rat]. Acute toxicity of the dust (LC50): 1200 mg/m³ 2 hours [Mouse].

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

No further information available.

Acute inhalation toxicity

No further information available.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation. Corneal injury is unlikely.

Sensitization

Based on information for component(s):

Skin contact may cause an allergic skin reaction.

For respiratory sensitization: No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

No relevant data found.

Carcinogenicity

No relevant data found.

Teratogenicity

No relevant data found.

Reproductive toxicity

No relevant data found.

Mutagenicity

For this family of materials: In vitro genetic toxicity studies were negative.

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Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

COMPONENTS INFLUENCING TOXICOLOGY:

Acrylic polymer(s)

Acute inhalation toxicity

The LC50 has not been determined.

Residual monomers

Acute inhalation toxicity

The LC50 has not been determined.

Aqua ammonia

Acute inhalation toxicity

LC50, Rat, male, 1 Hour, dust/mist, 9.850 mg/l

Diphenyl Ketone

Acute inhalation toxicity

The LC50 has not been determined.

1,2-Benzisothiazolin-3-one

Acute inhalation toxicity

The LC50 has not been determined.

Carcinogenicity

Component

List

Classification

Diphenyl Ketone

IARC

Group 2B: Possibly carcinogenic to humans

12. ECOLOGICAL INFORMATION

Toxicity

Acute toxicity to fish

Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Acute toxicity to aquatic invertebrates

Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Persistence and degradability

Biodegradability: No further information available.

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Bioaccumulative potential

Bioaccumulation: No further information available.

Mobility in soil

No relevant data found.

13. DISPOSAL CONSIDERATIONS

Disposal methods: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

DOT: Not regulated for transport

Classification for SEA transport (IMO-IMDG): Not regulated for transport

Classification for AIR transport (IATA/ICAO): Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312



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Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

Calculated RQ exceeds reasonably attainable upper limit.

Components	CASRN	RQ (RCRA Code)
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Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

California (Proposition 65)

United States TSCA Inventory (TSCA)

16. OTHER INFORMATION

Hazard Rating System HMIS

Health: 2*

Flammability: 0

Physical Hazard: 0

*Chronic Effects (See Hazards Identifier)

Legend:

DOW IHG	Dow Industrial Hygiene Guideline
ACGIH	USA. ACGIH Threshold Limit Values (TLV)
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit



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TWAL	Time Weighted Average
US WEEL	USA Workplace Environmental Exposure Levels

The product is for the industrial use only. We do not guarantee the safety in case the product is used for the other purposes. When using the product for healthcare application or food/feed application, consult us in advance.

This information is based on our present knowledge and sources believed to be reliable. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

TechniSoil Global Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer- specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.