

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Hull Cleaner
Formula reference BMBHC
Product use Cleaner
Restrictions on use Non identified

Details of the supplier of the safety data sheet

Company information Manufacturer Address
RMR Solutions
2202 Grand Commerce Dr.
Howell, MI 48855
Ph: 866-822-8744
Fax: 810-227-5595
Website: rmr solutions.com

Emergency phone number Chemtel 800-255-3924

2. HAZARDS IDENTIFICATION

GHS/HAZCOM 2012 Classification:

Health	Physical
Eye Damage Category 1 Skin Corrosion Category 1B	Corrosive to Metals Category 1

Label Elements

Danger!

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
P234 Keep only in original container.
P260 Do not breathe mist or spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves, protective clothing, eye protection and face protection. P301 + P330 + P331 **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.
P310 Immediately call a POISON CENTER or doctor.
P303 + P361 + P353 **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with soap and water.
P363 Wash contaminated clothing before reuse.
P310 Immediately call a POISON CENTER or doctor.
P304 + P340 **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER or doctor.
P305 + P351 + P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.



3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS #	PERCENTAGE
Hydrochloric acid	7647-01-0	10-30
Oxalic Acid	6153-56-6	1-3

The exact concentrations are a trade secret.

4. FIRST AID MEASURES

Eye contact	Flush the eyes with large amounts of water for 20 minutes, while holding the eyelids open to assure that the entire surface is flushed. Get immediate medical attention.
Skin contact	Immediately remove all contaminated clothing. Flush skin water for at least 15 minutes. Get immediate medical attention.
Inhalation	Remove to fresh air and keep comfortable breathing. Get immediate medical attention.
Ingestion	Do NOT induce vomiting. Rinse mouth with water. Get immediate medical attention.

Most important symptoms

Causes eye and skin burns. Causes severe irritation and burns to the respiratory tract. Causes burns and irritation of the linings of the mouth, throat, and gastrointestinal tract.

Indication of any immediate medical attention and special treatment, if needed

Seek immediate medical attention for all routes of exposure

5. FIRE-FIGHTING MEASURES

<u>Suitable extinguishing media</u>	Use media appropriate to surrounding fire.
<u>Specific Hazards Arising from the Chemical</u>	Thermal decomposition releases oxides of carbon, Hydrogen chloride, and hazardous chlorine compounds. May be corrosive to metals..
<u>Protective equipment and precautions for firefighters</u>	Firefighters should wear self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Ventilate the area. Do not breathe mist or spray. Prevent contact with spilled material. Do not touch or walk through spilled material. Wear protective equipment as directed in Section 8 of this SDS.

Methods and material for containment and cleaning up

Stop flow of material if this is without risk. Dike far ahead of liquid spill for later disposal. Neutralize with an acid spill kit or weak basic solution. Soak up with an inert material and place in suitable containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid release into the environment.

7. HANDLING AND STORAGE

Precautions for safe handling

Ensure adequate ventilation. Do not breathe mist or spray. Do not get in eyes, or on skin and clothing. Use with recommended personal protective equipment. Wash hands after use. Do not eat, drink, or smoke while using this product. Use in accordance with good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place away from bases, oxidizers, and metals. Store in a corrosive resistant container with a corrosive resistant inner liner. Protect containers from physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	Physical
Hydrochloric acid	2 ppm Ceiling ACGIH TLV 5 ppm Ceiling OSHA PEL
Oxalic Acid	1 mg/m ³ TWA, 2 mg/m ³ STEL ACGIH TLV 1 mg/m ³ TWA OSHA PEL

Engineering Controls

General room ventilation sufficient under normal use conditions. Emergency eye wash and washing facilities should be available.

Personal protective equipment

Respiratory Protection

None should be needed for normal use. If exposure limits are exceeded, or exposures are excessive, an approved respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.

Hand protection

Wear chemical resistant protective gloves.

Eye Protection

Wear chemical goggles.

Skin and body protection

Use personal protective equipment as required to prevent skin contact.

Hygiene measures

Handle in accordance with good industrial hygiene and safety.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Slightly pinkish
Odor	Not determined
Melting/Freezing Point	Not determined
Boiling Point / Range	Not determined
Flammability	Not flammable
Flammability Limits	
LEL	Not applicable
UEL	Not applicable

Flash Point	Not applicable
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
pH	<1
Kinematic Viscosity	Not determined
Solubility	Not determined

10. STABILITY AND REACTIVITY

Reactivity	May be corrosive to metals
Chemical stability	Stable
Possibility of hazardous reactions	May react violently with strong bases and oxidizers
Conditions to Avoid	Incompatible materials
Incompatible materials	Strong oxidizers. Strong bases.
Hazardous decomposition products	Thermal decomposition releases oxides of carbon, Hydrogen chloride, and hazardous chlorine compounds.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Inhalation	Causes severe irritation and burns to the respiratory tract.
Skin Contact	Causes severe irritation and burns.
Eye Contact	Severely irritating to eyes with redness, pain, and tearing. May cause permanent eye damage.
Ingestion	Causes burns and irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic Effects	None expected.
Eye Irritation/Damage	Direct eye contact causes severe eye irritation and possible eye damage accompanied by redness, pain, and tearing.
Skin Irritation/Corrosivity	Causes severe irritation and burns.
Sensitization	Not classified.
Carcinogenicity	Not classified. None of the components of this product are listed as carcinogens by the IARC, OSHA, or NTP.
Germ Cell Mutagenicity	Not classified.
Reproductive Toxicity Data	Not classified.
Specific Target Organ Toxicity Single Exposure (STOT-SE)	Not classified.

Specific Target Organ Toxicity Repeated Exposure (STOT-RE)

Not classified.

Aspiration

Not classified.

ACUTE TOXICITY VALUES**Hydrochloric acid**

Corrosive material. Acute toxicity is not obtainable.

Oxalic Acid

Oral rat LD50: 375 mg/kg, Dermal rabbit LD50: 20,000 mg/kg

12. ECOLOGICAL INFORMATION**Ecotoxicity**

This product is expected to be toxic in the aquatic environment with long lasting effects.

Oxalic AcidLC50: Leuciscus idus melanotus 325 mg/L/48 hr.
EC50: Daphnia Magna: 162 mg/L/48 hr.**Persistence and Degradability**

No additional information for product

Bio-accumulative Potential

No additional information for product

Mobility in Soil

No additional information for product

Other Adverse Effects

None known.

13. DISPOSAL INFORMATION**Disposal instructions**

Dispose of product in accordance with all local, state, and federal regulations.

14. TRANSPORT INFORMATION**Department of Transportation (DOT)****Proper Shipping Name (DOT)**

Hydrochloric acid solution

UN-No. (DOT)

UN1789

Class (DOT)

8

Packing group (DOT)

II

Hazard labels (DOT)

Corrosive

Dangerous for the environment

No

Transport by sea**Proper Shipping Name (IMDG)**

Hydrochloric acid solution

UN-No. (IMDG)

UN1789

Class (IMDG)

8

Packing group (IMDG)

II

Marine pollutant No

Air transport

Proper Shipping Name (IATA) Hydrochloric acid solution

UN-No. (IATA) UN1789

Class (IATA) 8

Packing group (IATA) II

Transport in Bulk According to IMO Instruments Not applicable.

15. REGULATORY INFORMATION

US Federal Regulations

SARA 311/312

Hazard Categories for SARA 311/312 Reporting: Classified as per Section 2 of this SDS according to OSHA HazCom 2012 GHS classification.

SARA 313

This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313(40 CFR372): None

CERCLA Section 103 Reportable Quantity

CERCLA Section 103 Reportable Quantity: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Hydrochloric acid (22.6% maximum) of 5,000 lbs., is 22,123 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state, and local regulations.

State Regulations

California Proposition 65

This product does not contain substances known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Revision History

Date of Current Revision December 07, 2023

Revision Summary New SDS

Date of Previous Revision N/A