MERRICK WHEELHOUSE INDUSTRIAL SOLUTIONS

SDS Safety Data Sheet

QUANTUM RENEW™ BREW

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier:

a) Trade Name: Quantum Renew™ Brew

1.2 Product Use: Product for removal of scale

a) Identified Use: Hard water, lime scale and calcium remover, nonionic cleaner

1.3 Manufacturer/Supplier

Company: Merrick Wheelhouse Industrial Solutions
Address: 1130Springtown RoadSteA. Alpha,NJ08865
Emergency: Infotrac: 800-535-5053

Telephone: (800) 547-1443

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

a) GHS Classifications:

i. Skin Irritation 2: Causes skin irritation.

ii. Eye Damage 2A: Causes eye damage.

b) Directive 67/548/EEC

i. Not classified according to Directives 67/548/EEC

2.2 Label elements

a) Label elements According GHS Classifications



b) Hazard Pictogram(s)

i. Signal Word: Warning

ii. Hazard Statement:

a. H315: May cause skin irritation.

b. H318: May cause serious eye damage.

iii. Precautionary Statements:

a. P264: Wash thoroughly after handling.

b. P280: Wear protective gloves/protective clothing/eye protection/face protection.

c. P302+P352: IF ON SKIN: Wash with plenty of soap and water.

d. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

1. OSHA: This material is not considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).
2. HMIS: Health — 1, Flammability — 0, Reactivity — 0
3. WHMIS (Canada): Class D2B - Skin irritant. Class D2B - Eye irritant.

2.4 Additional Information: No Fragrances Added

3 CHEMICAL COMPOSITION

3.1 GHS Classification (EC Classification No. 689/2008/EC)

Component	CAS #	Range %
Deionized Water	7732-18-5	50 - 90
Organic Acid	79-33-4	1 - 35
Surfactant	7757-82-6	1-15
Nonionic Surfactant	56-81-5	1-15
Proprietary	77-92-9	0.1-15
Dye	3844-45-9	0.001<1
Fragrance	5989-27-5	0.001<1

Note: In accordance with GHS Annex 4, section 3.3, some product identification is considered Confidential Business Information. The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4 FIRST AID MEASURES

4.1 Description of first aid measures

a) Inhalation Not a likely route of exposure. Remove to fresh air if irritation occurs. If symptoms develop, obtain medical attention.

b) Skin Contact May cause skin irritation or redness. No toxicity associated with the product being absorbed through skin. Wash exposed areas with water. In the unlikely event of prolonged irritation, seek medical advice.

c) Eye Contact This product causes irritation to the eyes after direct contact. Rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

d) Ingestion If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

a) Acute Eyes: May cause serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Skin: May cause skin irritation. Signs/ symptoms may include localized redness, swelling, and itching. Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

b) Delayed and Chronic Effects Expected to be similar to acute exposures.

4.3 Indication of the immediate medical attention and special treatment needed

Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Not flammable or combustible by OSHA/WHMIS criteria. Not Sensitive to mechanical impact and static discharge.

Flash Point > 220° C (428° F) Explosive Limits: NA Auto-Ignition Temperatures: NA

5.1 Extinguishing media

a) Suitable Extinguishing Media: Use extinguishing media appropriate to surrounding fire conditions. Unsuitable Extinguishing Media: None known.

5.2 Special hazards arising from the substance or mixture

a) Containers may rupture from exposure to high temperatures, releasing contents that may be slippery.

5.3 Advice for fire-fighters

a) Suitable protective clothing should be worn in fire conditions. Extinguish preferably with dry chemical, foam or water spray.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

a) Do not touch or walk-through spilled material.

b) Use personal protection recommended in Section 8.

6.2 Environmental Precautions: None

6.3 Methods and material for containment and cleaning up

a) Rinse area with water. Dispose of material in accordance with local regulations.

6.4 Reference to other sections See Also Section 7, 8, 13

6.5 Additional Information: None

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

a) Do not swallow. Wash thoroughly after handling. See Section 8 for information on Personal Protective Equipment.

7.2 Conditions for safe storage

a) Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of reach of children

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

a) Occupational Exposure Limits

i. No Threshold Limit Value (TLV) established (ACGIH).

ii. No Permissible Exposure Limit (PEL) established (OSHA).

b) Biological Limit Value

a) No hazardous ingredients in reportable quantities under USA, Canada, EU, and UN regulations are present in this product. No Threshold Limit Value (TLV) established (ACGIH). No Permissible Exposure Limit (PEL) established (OSHA).

8.2 PNECs and DNELs

a) No PNECs or DNELs are available for this product. As with all chemical products, users are cautioned to avoid unnecessary exposures.

8.3 Personal protection equipment

a) Respiratory Protection: Usually not needed.

b) Eye Protection: Wear safety glasses. Ensure that eyewash stations and safety showers are close to the workstation location. Use equipment for eye protection that meets the standards referenced by OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

c) Hand Protection: Wear protective gloves. Consult manufacturer specifications for further information.

d) Skin and Body Protection: Wear protective gloves.

e) Engineering Controls: No special controls required

f) General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Ready-To-Use (RTU)

- Appearance: Water-like liquid
- Color: Clear to Amber
- Odor: Slightly Acrid
- Odor Threshold: Not available
- pH: 2.3
- Melting Point / Freezing Point: < 0 °C (32 °F)
- Initial Boiling Point: Not available
- Boiling Point: > 112 °C (233.6° F)
- Flash Point: > 112 °C (233.6° F)
- Evaporation Rate:1 (Water = 1)
- Flammability (solid, gas): Non-Flammable
- Upper/Lower Flammability Limit: Non-Flammable
- Auto-ignition Temperature: Non-Flammable
- Vapor Pressure: Not available.
- Vapor Density: 3.2 (Air = 1)
- Relative Density: Not available
- Solubilities: Infinitely miscible with water.
- Partition Coefficient: N-octanol/Water: Not available
- Decomposition Temperature: Not available
- Percent Volatile, wt.%: 0%
- Density: 1.16 g/mL

10 STABILITY AND REACTIVITY

10.1 Reactivity

a) Contact with incompatible materials.

10.2 Chemical stability

a) Stable under normal conditions. Avoid temperature extremes.

10.3 Possibility of hazardous reactions None known.

10.4 Conditions to avoid

a) Do not freeze. Do not use above ambient temperature. 10.5 Incompatible materials , possibly Oxidizers

10.6 Hazardous Decomposition Product(s) Not available.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Mixtures

i. Effects of Acute Exposure

ii. Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

iii. Inhalation: Not Known. Not a likely route of exposure.

iv. Skin Contact: May causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

v. Eye Contact: May causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or loss of vision.

vi. Corrosivity: None expected.

vii. Repeated Dose toxicity: Prolonged or repeated contact may dry skin and cause irritation.

viii. Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by ACGIH, IARC, OSHA,NTP.

ix. Mutagenicity: Not available

x. Toxicity for reproduction: Not available

11.2 Other information None

12 ECOLOGICAL INFORMATION

12.1 Toxicity: Not expected to be harmful to aquatic or soil environments.
12.2 Persistence and degradability: Readily biodegradable organic liquid.
12.3 Bio accumulative potential: Not available
12.4 Mobility in soil: Not available
12.5 Results of PBT and vPvB assessment: Not available
12.6 Additional Information on Eco toxicity: LC_{50} >160 mg/L

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

a) This product has been EPA Safer Choice approved for direct release. End users should check with local and state agencies for guidance on disposal. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. Containers must not be punctured or destroyed by burning, even when empty.

13.2 Additional Information: None

14 TRANSPORT INFORMATION

14.1 Land transport (ADR/RID) (c)(d): Not classified as dangerous for transport.

a) U.S. Department of Transportation (DOT) (c)(d): Not classified as dangerous for transport.
b) Canada Transportation of Dangerous Goods (TDG) (c)(d): Not classified as dangerous for transport.
c) Sea transport (IMDG) (c)(d): Not classified as dangerous for transport.
d) Air transport (ICAO/IATA) (c) (d): Not classified as dangerous for transport.

Note: Consult with transport provider and check relevant regulations for Special Provisions.

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations and associated hazards for the mixture

Country	Chemical Inventory or Regulation	Classification	Associated Hazards
Australia	Australian Inventory of Chemical Substances (AICS)	Listed	None
Canada	Domestic Substances List (DSL/NDSL)	The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.	
	WHMIS Classification		
	Canada Ingredient Disclosure List (CIDL)		
China	Inventory of Existing Chemical Substances in China (IECSC)	Listed	None
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed	None
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Listed	None
Korea	Korea Existing Chemicals Inventory (KECI)	Listed	None
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Listed	None
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Listed	None
Taiwan	National Existing Chemical Inventory in Taiwan (NECI)	Listed	None
USA	TSCA (Toxic Substance Control Act	The components of this product are in compliance with the chemical notification requirements of TSCA.	
	SARA 311/312 - Hazard Categories	None	None
	SARA 302 - Extremely Hazardous Substances	Not Listed	None
	SARA 313 - Toxic Chemicals	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.	
	CERCLA (Comprehensive Environmental Response Compensation and Liability Act)	This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).	
	CAA (Clean Air Act 1990)	This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.	
	CWA (Clean Water Act)	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).	
	State Right to Know Lists	This product does not contain any substances regulated by state right-to-know regulations.	
	Proposition 65 (California)	This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.	

16	OTHER INFORMATION

Additional Information: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

References: RTECS, CAS Registry, EINECS/ESIS, Manufacturer Information

End of Safety Data Sheet