

7995MSDS REC'D by Trane October 3, 2014
CHM00683

Goodway Technologies Corporation MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: ScaleBreak[®], an Industrial Descaling Solution

Goodway Technologies Corporation

420 West Avenue

Stamford, CT 06451 USA

Toll free (800) 333-7467 For chemical emergency, call Chemtree at 1-800-424-9300

ScaleBreak is an acid based liquid de-scaler for dissolving mineral deposits from water passages in heat transfer equipment. This material should be used only as directed in separate operational literature. Do not circulate this product for more than a four (4) hour period without consulting the manufacturer or your local representative. Most cleaning cycles can be accomplished within a two (2) to four (4) hour cycle. Use at ambient temperatures. Increase in temperature places personnel at risk and increases aggressiveness of solution.

SECTION 2: HAZARDS IDENTIFICATION

Components:		(JSHA	ACGIH	Other
Specific Chemical Identity	CAS	% Weight	PEL	TLV	Limits
Aqueous Hydrogen Chloride	7647-01-0	9.0	5 ppm	(ceiling) 2 ppm (ceiling)	N/A
Health Hazards: If used as directed, should not be considered hazardous. Not a carcinogen.					
Volatile Organic Compounds (VOC): None Hazardous Air Pollutant (HAP): None					

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Cleaning/Descaling Compound - Formula: Proprietary

SECTION 4: FIRST AID MEASURES

Eye contact: Flush eyes immediately with large quantities of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire surface. Washing eyes within one (1) minute is necessary to achieve maximum effectiveness. If irritation persists, get medical attention.

Skin contact: Wash with plenty of water for 15 minutes. Remove contaminated clothing and wash before reuse. Seek medical attention if symptoms are present.

Ingestion: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water or milk of magnesia; if available, several glasses of milk.

Inhalation: Remove to fresh air. If person is not breathing, administer mouth-to-mouth resuscitation. Seek medical attention if loss of consciousness occurs or breathing stops. Seek medical attention if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: N/A Flammable Limits: N/A

Extinguishing Media: Water spray, foam, CO₂

Special Fire Fighting Procedures: Use NIOSH/MSHA approved self-contained breathing apparatus in areas where this material is involved in a fire. This product is nonflammable.

Unusual Fire Fighting and Explosion Hazards: Protective clothing for skin and eye protection should be worn.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is spilled or released: This material is biodegradable. Use appropriate protection—rubber gloves, splash resistant chemical glasses. Contain spill. Neutralize with copious amounts of water. Slowly add a soda ash mixture to the residue. This mixture should be 10 pounds of soda ash to 5 gallons of water. This should bring the spill residue within normal pH range of 6-8.

SECTION 7: HANDLING AND STORAGE

This product has a wide temperature storage range $(-15^{\circ}\text{C to }82^{\circ}\text{C})$. Make sure containers are sealed in storage when not used. Shelf life is 4 (four) years. Store in original container or one of similar material. Do not store in metal containers. Maintain label integrity.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None require under normal conditions with adequate general ventilation.

Protected Clothing: Rubber may be used.

Protective Gloves: Chemical resistant/rubber gloves

Ventilation: Mechanical (general).

Eyes: Splash Resistant Chemical Glasses.

Other Protective Clothing or Equipment: Standard work clothes should be worn. Wash soiled clothing in soap and water and dry before reuse. Eyewash facilities should be accessible.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 108°C Specific Gravity (H₂O=1): 1.06 Vapor Pressure (mm. Hg): 20 Torr

Melting Point: -17°C Vapor Density (air=1): N/A Evaporation Rate: N/A Solubility in Water: Complete Appearance and Odor: Amber, Citrus Odor pH: < 2

SECTION 10: STABILITY AND REACTIVITY

Conditions contributing to instability: Under normal conditions this product is stable.

Incompatibility: Do not mix with alkaline products.

Hazards Decomposition Products: None

Conditions Contributing to Hazardous Polymerization: None. **Corrosive effects:** This material is slightly corrosive to most metals.

SECTION 11: TOXICOLOGICAL INFORMATION

This product does not contain any material shown to be carcinogen by the National Toxicology Program (NTP) or The International Agency for Research in Cancer (IRAC).

While no data is currently available on the ecology of this formulation as a whole, empirically we know that the components of Scalebreak are not bio accumulate in animal or plant tissue. It is known that these compounds quickly are broken down or biodegraded into compounds such as carbon dioxide (CO_2) and water (H_2O) .

SECTION 12: ECOLOGICAL INFORMATION

This product is biodegradable. This product neutralizes in use and is non-toxic in that state.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: This product is diluted and expended during use. Prior to disposal monitor pH. When pH is greater than 5 (in most areas, check local regulations) it may be disposed of with non-hazardous by-products and production residues. Residues can also be disposed of through normal sump and sewage treatment systems.

Precautions to be Taken in Handling and Storage: Good industrial hygiene practices should be adhered to when storing and handling this product. Avoid contact with undiluted product. This material when used or completely spent is non-hazardous. It neutralizes itself in use.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT Proper Shipping Name: Cleaning Preparation, NMFC No. 48580-03

For Overseas Shipments: Use No. 3402.90.5030

This product is not considered hazardous for ground shipments of less than 5000 lbs. Air shipments must adhere to requirements of subchapter C of 49 CFR (Hazardous Materials Regulations) for hydrochloric acid (a Class 8 corrosive) ID no.UN1789.

SECTION 15: REGULATORY INFORMATION

This product complies with current Workplace Hazardous Information Systems. This product is NSF approved, category A3; NSF Registered for use in beverage, pharmaceutical, bottling, poultry, and other food processing operations, but not intended for direct food contact. Non-reported under SARA Title: 3 Section 311/312/313 Categorization.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title 3: Reportable elements: Hydrochloric Acid, CAS# 7647-01-0

U.S. Toxic Substance Control Act: All ingredients contained in this product have been registered under the Toxic Substance Control Act. This product contains one substance that is subject to reporting—CAS# 7647-01-0 Hydrochloric Acid. This product does not contain any Class I or Class II ozone depleting substance. Neutralization of the product and clean up the area of spillage is undertaken by flooding with copious amount of water and neutralization.

Waste Classification Non-Hazardous: This product neutralizes itself in operation.

SECTION 16: OTHER INFORMATION:

This information is relative to the product as shipped and when used at prescribed dilutions ratios.

HMIS Health 1, Flammability 0, Physical Hazard 0

Revision Date: 3/4/13

This Material Safety Data Sheet was prepared in accordance with 29 CFR 1910:1200 and the ANSI Z400.1 sixteen-part format. All information, recommendations and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable; however it is the user's responsibility to determine the safety, toxicity and suitability for their own use of the product described herein. Since actual use by others is beyond our control, no guarantees, expressed or implied, are made by Goodway Technologies Corp. and its representatives as to the effects of such use, the results to be obtained or the safety and toxicity of the product, nor does Goodway Technologies Corp. or its representatives assume any liability arising out of the use by others of the product referred herein. The information herein is not be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws of government regulations.