



Safety Data Sheet

Issue Date: 17-Jan-2018

Revision Date: 19-Jun-2018

Version 1

1. IDENTIFICATION

Product Identifier

Product Name ScaleBreak

Other means of identification

SDS # GOOD-002-CA

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Descaler

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial Supplier Identifier

THIS SAFETY DATA SHEET
IS NOT COMPLIANT UNLESS
CANADIAN ADDRESS IS USED

Manufacturer Address

Goodway Technologies Corp.
420 West Ave.
Stamford, CT 06902
Phone: 1-800-333-7467
www.goodway.com

Emergency Telephone Number

Initial supplier phone number Please enter Initial Suppliers Phone Number here
Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America)

2. HAZARDS IDENTIFICATION

Appearance Orange viscous liquid **Physical state** Liquid **Odour** Mild

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (STOT) — single exposure	Category 3

Label Elements

Signal word

Danger

Hazard statements

Causes skin irritation
Causes serious eye damage
May cause respiratory irritation

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapours/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTRE or doctor
 IF ON SKIN: Wash with plenty of water and soap
 Take off contaminated clothing and wash it before reuse
 If skin irritation occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTRE/doctor/physician if you feel unwell
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
 Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Hydrochloric acid	7647-01-0	9.9	-	-
Glycolic Acid	79-14-1	1	-	-
Iron(III) Chloride, Ferric Chloride	7705-08-0	0.5	-	-

4. FIRST AID MEASURES

First Aid Measures**General advice**

Provide this SDS to medical personnel for treatment.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin contact

Wash with plenty of soap and water. Remove contaminated clothing, wash thoroughly before reuse. If irritation occurs: Get medical advice/attention.

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Loosen tight clothing such as collar, tie, belt, or waistband. If symptoms persist, seek medical attention.
Ingestion	Rinse mouth thoroughly with water. Remove dentures, if any. Do not induce vomiting without medical advice. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor breathing. Never give anything by mouth to a person who is unconscious or convulsing. Do not leave victim unattended. Seek immediate medical attention/advice.

Most important symptoms and effects

Symptoms	<p>EYES: Causes severe eye irritation and serious eye damage. Symptoms may include inflammation, pain, blurred vision, tearing and burns. May cause chemical conjunctivitis. May cause vision impairment and permanent eye damage.</p> <p>SKIN: Causes skin irritation. Symptoms may include localized redness, itching and discomfort. Prolonged and repeated contact with unprotected skin may cause drying and cracking of the skin and dermatitis.</p> <p>INHALATION: Mist or vapor may cause irritation of the nose, throat and respiratory tract. Symptoms may include sore throat, runny nose, cough and shortness of breath.</p> <p>INGESTION: Causes irritation of the gastrointestinal tract with abdominal pain, nausea, vomiting and diarrhea. May be harmful if swallowed.</p> <p>CHRONIC: Persons with pre-existing disorders of the skin or impaired respiratory function may be more susceptible to the effects of this substance. Prolonged and repeated skin contact can result in defatting of the skin and dermatitis.</p>
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Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically and supportively. Treatment of exposure should be directed at the control of symptoms and the clinical condition.
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5. FIREFIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	No information available.
Hazardous Combustion Products	Smoke, fumes or vapors, and oxides of carbon.
Explosion Data	
Sensitivity to Mechanical Impact	Not expected.
Sensitivity to Static Discharge	Not expected.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate unnecessary personnel. Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate affected area. Remove all sources of ignition. No smoking in spill area. Product may cause a slip hazard.
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For emergency responders Follow all firefighting procedures in Section 5. Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Approach release from upwind. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Prevent from entering drains, sewers, streams or other bodies of water. If runoff occurs, notify authorities as required.

Methods for cleaning up Collect with absorbent, non-combustible material in to suitable containers. Clean surface thoroughly to remove residual contamination. Should not be released into the environment.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Do not transfer contents to bottles or other unlabeled containers. Keep containers closed when not in use and upright to prevent leakage. Empty containers retain product residues. Follow SDS precautions in handling empty containers. Use appropriate containment to avoid environmental contamination. Do NOT take internally. Keep out of the reach of children.

Incompatible materials Strong oxidising agents Strong acids Bases

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
Hydrochloric acid 7647-01-0	Ceiling: 2 ppm Ceiling: 3 mg/m ³	Ceiling: 2 ppm	CEV: 2 ppm	Ceiling: 5 ppm Ceiling: 7.5 mg/m ³
Iron(III) Chloride, Ferric Chloride 7705-08-0	TWA: 1 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³	TWA: 1 mg/m ³	TWA: 1.0 mg/m ³

Appropriate engineering controls

Engineering controls Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. Local exhaust ventilation recommended. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical resistant splash goggles.

Skin and body protection Oil/solvent resistant gloves. Protective clothing as required by workplace standards.

Respiratory protection Ensure adequate ventilation, especially in confined areas.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	Orange viscous liquid
Colour	Orange
Odour	Mild
Odour Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	<3.0	
Melting point / freezing point	Not determined	
Boiling Point / Boiling Range	100 °C / 212 °F	
Flash Point	No data available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid- Not applicable	
Flammability Limit in Air		
Upper Flammability Limit	Not determined	
Lower Flammability Limit	Not determined	
Vapour Pressure	Not determined	
Vapour Density	Not determined	
Relative Density	Not determined	
Water Solubility	Miscible in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive properties	No information available.	
Oxidising properties	No information available.	

Other Information

Softening Point	No information available
Molecular weight	No information available
VOC Content (%)	>85%
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions.
Chemical Stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous Polymerisation	Hazardous polymerisation does not occur.
Conditions to Avoid	Keep out of reach of children.
Incompatible Materials	Strong oxidising agents. Strong acids. Bases.
Hazardous Decomposition Products	Smoke, fumes or vapors, and oxides of carbon. Nitrogen oxides (NOx). Lithium oxides. Sulphur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye contact	Avoid contact with eyes.
Skin contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	2,374.80
ATEmix (dermal)	50,656.67
ATEmix (inhalation-gas)	5,689.92
ATEmix (inhalation-dust/mist)	0.50

Unknown acute toxicity No information available

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid 7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h
Glycolic Acid 79-14-1	= 1950 mg/kg (Rat)	-	= 3.6 mg/L (Rat) 4 h > 5.2 mg/L (Rat) 4 h
Iron(III) Chloride, Ferric Chloride 7705-08-0	= 316 mg/kg (Rat) = 450 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation** Causes skin irritation.**Serious eye damage/eye irritation** Causes serious eye damage.**Carcinogenicity** Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrochloric acid 7647-01-0	-	Group 3	-	X

Legend**IARC (International Agency for Research on Cancer)**

Group 3 IARC components are "not classifiable as human carcinogens"

OSHA (Occupational Safety and Health Administration of the US Department of Labour)

X - Present

STOT - single exposure May cause respiratory irritation.**12. ECOLOGICAL INFORMATION****Ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrochloric acid 7647-01-0	-	282: 96 h <i>Gambusia affinis</i> mg/L LC50 static	-	-
Glycolic Acid 79-14-1	-	5000: 96 h <i>Brachydanio rerio</i> mg/L LC50 static	-	-
Iron(III) Chloride, Ferric Chloride 7705-08-0	-	20.26: 96 h <i>Lepomis macrochirus</i> mg/L LC50 semi-static 20.95 - 22.56: 96 h <i>Pimephales promelas</i> mg/L LC50 semi-static 75.6: 96 h <i>Gambusia affinis</i> mg/L LC50 static	-	9.6: 48 h <i>Daphnia magna</i> mg/L EC50 Static 27.9: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence/Degradability The organic components of this product are readily biodegradable; however, the inorganic components are not biodegradable.**Bioaccumulation** No information available.**Mobility** .

Chemical Name	Partition Coefficient
Glycolic Acid 79-14-1	-1.11
Iron(III) Chloride, Ferric Chloride 7705-08-0	-4

Other Adverse Effects No information available.**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods****Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

REGULATORY INFORMATION

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Hydrochloric acid	X	X	X	X	X	X	X	X
Glycolic Acid	X	X	X	X	X	X	X	X
Iron(III) Chloride, Ferric Chloride	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health Hazards 2	Flammability 0	Instability 0	Special Hazards -
HMIS	Health Hazards 2	Flammability 0	Physical hazards 0	Personal Protection -

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value
*	Skin designation
Issue Date:	17-Jan-2018

Revision Date: 19-Jun-2018

Revision Note: No information available.

Disclaimer

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.

End of Safety Data Sheet