

SAFETY DATA SHEET



TOWERSHINE

Issue Date: 03/08/2018

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: TowerShine
SDS Number: TwrShine-01
Revision Date: 03/08/2018
Product Description: All-purpose cooling tower fill detergent.
Product Use: COOLING TOWER FILL CLEANER
Supplier Details: Goodway Technologies
420 West Avenue
Stamford, CT 06902
Emergency: CHEMTREC 1-800-424-9300 (North America)
Phone: 1-800-243-7932
Fax: 203-359-9601
Web: www.goodway.com

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2 A
Health, Specific target organ toxicity - Single exposure, 3
Health, Acute toxicity, 4 Inhalation
Health, Acute toxicity, 4 Oral

GHS Label elements, including precautionary statements

GHS Hazard Pictograms: Signal Word: Warning



GHS Hazard Statements:

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H332 - Harmful if inhaled
H302 - Harmful if swallowed

GHS Precautionary Statements:

P261/P271 - Avoid breathing fumes/mist; maintain good ventilation
P280 -Gloves/protective clothing/eye and/or face protection.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352 - IF ON SKIN: Rinse with water; if irritation persists, see physician
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest
P305+351+338 - EYES: Rinse with water for several minutes. Remove contact lenses. Continue rinsing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P332+313 - If skin irritation occurs: Get medical advice/attention.
P337+313 - Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.

3**COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

CAS#	%	Chemical Name
6834-92-0	5-10%	Silicic acid (H ₂ SiO ₃), disodium salt
111-76-2	<5%	2-Butoxy-1-ethanol
36445-71-3	<5%	Benzenesulfonic acid, decyl(sulfophenoxy)-, disodium salt
7732-18-5		Water
138-86-3	<3%	Cyclohexene, 1-methyl-4-(1-methylethenyl)-

4**FIRST AID MEASURES**

Inhalation:	If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.
Skin Contact:	Promptly flush skin with water until all chemical is removed. Remove contaminated clothing and wash before reuse. Wash with soap and water.
Eye Contact:	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Get medical attention if irritation occurs and persists.
Ingestion:	Do NOT induce vomiting or attempt chemical neutralization. Drink large quantities of water. Give one ounce of vinegar in an equal amount of water. Seek immediate medical attention

5**FIRE FIGHTING MEASURES**

Flammability:	Non-flammable
Flash Point:	Non-flammable

This material is non-flammable. If exposed to fire from another source, use extinguishing media suitable for that source.

6**ACCIDENTAL RELEASE MEASURES**

Pick up excess with inert absorbent material and place into separate waste container. Dispose of in accordance with all Federal, State and Local regulations.

7**HANDLING AND STORAGE**

Handling Precautions:	Avoid breathing vapors or mist. Wash thoroughly after handling.
Storage Requirements:	Store in original tightly sealed container. Store in cool/dry area. Keep away from heat, sparks, and flames.

8**EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering Controls:	All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).
Personal Protective Equipment:	Eye/face protection: Face shield and safety glasses. Skin protection: Handle with gloves. Wash and dry hands. Full contact: Material: Nitrile rubber Splash contact: Material: Nitrile rubber Control of environmental exposure: Do not let product enter drains.

Silicic acid (H₂SiO₃), disodium salt (6834-92-0): no data available

2-Butoxy-1-ethanol (111-76-2)

Components with workplace control parameters

TWA 20 ppm (TLV) USA. ACGIH Threshold Limit Values
Eye & Upper Respiratory Tract irritation

Confirmed animal carcinogen with unknown relevance to humans

TWA 5 ppm USA: NIOSH Recommended
24 mg/m3 Exposure limits
Potential for dermal absorption

TWA 50 ppm USA: Occupational Exposure Limits
240 mg/m3 (OSHA) – Table Z-1 Limits for air contaminants
Skin designation
The value is mg/m3 is approximate

TWA 25 ppm USA. OSHA- Table Z-1 Limits for air contaminants – 1910.1000
120 mg/m3
Skin notation

9	PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	Greenish yellow	Solubility:	Infinite
Physical State:	Liquid		
Spec Grav./Density:	1.066-1.07		
pH:	10.75 to 11.0		
Evap. Rate:	Not applicable		

10	STABILITY AND REACTIVITY
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Reactivity: Chemical	Stable under recommended storage conditions.
Stability: Conditions to Avoid: Materials to Avoid:	Product is stable under normal conditions. Do not mix with other cleaning compounds. Do not mix with strong acids. Strong Acids
Hazardous Decomposition:	None known
Hazardous Polymerization:	Will not occur.

11	TOXICOLOGICAL INFORMATION
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Silicic acid (H₂SiO₃), disodium salt (6834-92-0)

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 1,153 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: Skin - Rabbit result: Severe skin irritation - 24 h

Serious eye damage/eye irritation: no data available Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human Carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Reproductive toxicity - rat - Oral:

Effects on Newborn: Stillbirth. Effects on Newborn: Live birth index (# fetuses per litter; measured after birth). Effects on Newborn: Weaning

or lactation index (i.e. # alive at weaning per # alive at day 4): NDA
Specific target organ toxicity- single exposure: May cause respiratory irritation
Specific target organ toxicity- repeated exposure: NDA
Aspiration Hazard: NDA
Additional Information:

RTECS: VV9275000

Burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, and material is extremely destructive to the mucous membranes and upper respiratory tract and skin.

2-Butoxy-1-ethanol (111-76-2)
Information of toxicological effects

Acute Toxicity:

LD50 Oral- Rat- 470 mg/kg

LC50 Inhalation- Rat- 4 hours – 450 ppm: Remarks – Behavioral Ataxia: Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

LD50 Dermal – Rabbit – 220 mg/kg

LD50 Intraperitoneal – Rat – 220 mg/kg

LD50 Intravenous – Rat – 307 mg/kg

Skin corrosion/irritation: Skin: Rabbit Result: Open irritation test

Serious eye damage irritation – Eyes- Rabbit result- Moderate eye irritation

Respiratory or or skin sensitization: No data available

Germ Cell Mutagenicity: NDA

Carcinogenicity:

IARC: 3 – group 3: Not classifiable as to its carcinogenicity to humans (2-butoxyethanol)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

Reproductive Toxicity: NDA

Overexposure may cause respiratory disorder(s) based on tests with lab animals

Specific target organ toxicity- single exposure: NDA

Specific target organ toxicity- repeated exposure: NDA

Aspiration hazard: NDA

Additional Information:

RTECS: KJ8575000

Human exposure above 200 ppm can be expected to cause necrosis, damage to the kidney and liver and present an abnormal blood picture showing erythropenia, reticulocytosis, granulocytosis, leukocytosis, and would be likely to cause fragility or erythrocytes and hematuria. Swallowing of 2 butoxyethanol results in a sour taste that turns into a burning sensation and is followed by numbness of the tongue which indicates paralysis of the sensory nerve endings, central nervous system depression, headache, narcosis
Stomach- Irregularities – Based on Human experience.

Toxicity: NDA

Information on
ecological effects :

Persistence & biodegradability : NDA
Bioaccumulative Potential: NDA
Mobility in soil: NDA
Results of PBT and vPvB assessment not available as chemical
safety assessment not required/not conducted
Other adverse effects :NDA
2-butoxy-ethanol (111-76-2)

Information on ecological effects:
Toxicity:
Toxicity to fish: LC50: other fish : 220 mg/l- 96 h
Toxicity to daphnia and EC50- Daphnia Magna (Water flea) – 1,815
mg/l – 24 h other aquatic invertebrates
Persistence and biodegradability: NDA
Ratio BOD/ThBOD 88%
Bioaccumulative potential: NDA
Results of PBT and vPvB assessment PBT/vPvB assessment not
available as chemical safety assessment not required/not conducted.
Other Adverse effects: NDA

13

DISPOSAL CONSIDERATIONS

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

14

TRANSPORT INFORMATION

**Not regulated by
D.O.T.**

15

REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Silicic acid (H₂SiO₃), disodium salt (6834-92-0) [n/a%] TSCA

2-Butoxy-1-ethanol (111-76-2) [n/a%] HAP, MASS, OSHAWAC, PA, TSCA, TXAIR

Benzenesulfonic acid, decyl(sulfophenoxy)-, disodium salt (36445-71-3) [n/a%] TSCA

Water (7732-18-5) [n/a %] TSCA

Cyclohexane, 1-methyl-4-(1-methylethenyl)- (138-86-3) [n/a/ %] TSCA

Regulatory code descriptions

TSCA = Toxic Substance Control Act

HAP = Hazardous Air Pollutants

MASS= MA Massachusetts Hazardous air substances list

OSHA = OSHA Workplace Air Contaminants

PA = PA Right-to-Know List of Hazardous Substances

TXAIR = TX Air Contaminants with Health Effects Screening Level

16

OTHER INFORMATION

The manufacturer makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein. The manufacturer shall not be liable to the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, adequacy or furnishing of such information. It is for the purchaser to decide whether said information is suitable for the purchaser's purposes. No warranty of merchantability, fitness for any particular purpose is expressed or implied regarding the accuracy or completeness of this information. The results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.