SAFETY DATA SHEET

Issuing Date 07-Jan-2014 **Revision Date** 10-Jun-2016 **Revision Number** 4

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name **Crystal**

Other means of identification

Product Code(s) **6003**

UN Number **UN3266**

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Glasswasher Detergent

Uses advised against No information available

Supplier's details

Supplier Address
Sunburst Chemicals, Inc.
220 W. 86th St.
Bloomington, MN 55420
TEL: 952-884-3144

Emergency Telephone Number 1-866-303-6943

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

PRODUCT AS SOLD

Acute Dermal Toxicity	Category 4
Skin Corrosion/Irritation	Category 1 Subcategory 1A
Serious Eye Damage/Eye Irritation	Category 1

PRODUCT AT USE DILUTION	
Acute Dermal Toxicity	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

PRODUCT AS SOLD

Signal Word **Danger**

Hazard Statements

- Harmful if in contact with skin
- Causes severe skin burns and eye damage

Appearance Red **Physical State** Liquid **Odor** None

Precautionary Statements

Prevention

- Wear protective gloves and clothing
- Do not breathe mist
- Wash face, hands, and any exposed skin thoroughly after handling

General Advice

- IF exposed or concerned: Get medical attention/advice

Eyes

- 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 CENTER or doctor/physician.

Skin

- IF ON SKIN: Wash with plenty of soap and water
- Take off contaminated clothing and wash before reuse
- If skin irritation occurs: Get medical advice/attention
- Call a POISON CENTER or a doctor/physician if you feel unwell

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion

- IF SWALLOWED: Call a POISON CENTER or doctor/physician immediately
- Rinse mouth, sip a glass of water if able to do so.
- Do NOT induce vomiting.

Storage

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

Disposal

- Dispose of contents/container to an approved waste disposal plant

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Harmful to aquatic life with long lasting effects

PRODUCT AT USE DILUTION

Signal Word **Danger**

Hazard Statements

- Harmful if swallowed
- Causes severe skin burns and eye damage

Emergency Overview

Appearance Colorless **Physical State** Liquid **Odor** None

Precautionary Statements

Prevention
- Wear protective gloves / protective clothing / eye protection / face protection
- Wash face, hands and exposed skin thoroughly after handling.

General Advice
- IF exposed or concerned: Get medical attention/advice

Eyes
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: get medical advice / attention.

Skin
- IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water.
- Wash contaminated clothing before reuse
- If skin irritation occurs: Get medical advice / attention

Inhalation
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor / physician if you feel unwell.

Ingestion
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth, sip a glass of water if able to do so.
- Do NOT induce vomiting

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

Disposal
- Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT AS SOLD

Chemical Name	CAS-No	Weight %	Trade secret
Sodium Hydroxide	1310-73-2	10 - 30	*
2-Propenoic acid, telomer with sodium hydrogen sulfite, sodium salt	66019-18-9	3 - 10	*
Tetrasodium ethylenediamine tetraacetate	64-02-8	1 - 5	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

PRODUCT AT USE DILUTION

Contains ingredients listed above at weight % less than 0.5%

4. FIRST AID MEASURES

PRODUCT AS SOLD

Description of necessary first-aid measures

General Advice – Immediate medical attention is required

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact Wash off with warm water and soap. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Most important symptoms/effects, acute and delayed
Most Important Symptoms/Effects Slippery feeling, burning sensation on skin or eyes

Indication of immediate medical attention and special treatment needed, if necessary
Notes to Physician Treat symptomatically.

PRODUCT AT USE DILUTION

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention / advice.

Skin Contact Wash off with warm water and soap. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention / advice.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water. Carbon dioxide (CO_2). Dry chemical.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical
No information available

Explosion Data
Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

PRODUCT AS SOLD

Personal precautions, protective equipment and emergency procedures
Personal Precautions Avoid contact with skin, eyes and clothing. Do not breathe spray mist. Use personal protective equipment. If spilled, take caution, as material can cause surfaces to become slippery.

Environmental Precautions
Environmental Precautions Avoid release to the environment. Collect spillage. See Section 12 for additional Ecological Information. Dispose of contents/container to an approved waste disposal plant.

Methods and materials for containment and cleaning up
Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Collect and reuse if possible. Following product recovery, flush area with water.

PRODUCT AT USE DILUTION

Personal Precautions	Avoid contact with skin, eyes and clothing. Do not breathe spray mist. Ensure adequate ventilation. Use personal protective equipment. Solution can cause surfaces to become slippery.
Environmental Precautions	Avoid release to the environment. Rinse or mop up use solutions. Small volumes may be flushed down sanitary sewer drains.

Methods and materials for containment and cleaning up

Methods for Containment	Prevent solutions from spillage.
Methods for Cleaning Up	Flush area with water.

7. HANDLING AND STORAGE

PRODUCT AS SOLD

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not eat, drink or smoke when using this product, or its use solutions.

Conditions for safe storage, including any incompatibilities

Storage Keep container closed when not in use. Keep out of the reach of children.

Incompatible Products None known based on information supplied.

PRODUCT AT USE DILUTION

Advice on safe handling	Do not ingest. Do not get in eyes, on skin or on clothing. Do not breathe mist. Wash hands thoroughly after handling.
Conditions for safe storage	Keep out of reach of children. Store in suitable labeled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m3	TWA: 2 mg/m3 (vacated) Ceiling: 2 mg/m3	IDLH: 10 mg/m3 Ceiling: 2 mg/m3

Appropriate engineering controls

Engineering Measures Eyewash stations

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety goggles.

Skin and Body Protection Rubber or vinyl gloves when handling solid chemicals or their use solutions.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene Measures Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT AS SOLD

Information on basic physical and chemical properties

Physical State	Liquid	**Appearance**	Red
Odor	None	**Odor Threshold**	No information available

Property	Values for Product as Sold	Values for Product at Use Dilution

pH	12.5 – 13.75	11.5 – 12.0
Melting Point/Range	No date available	
Boiling Point/Boiling Range	212 °F	212 °F
Flash Point	None.	
Evaporation rate	No data available	Physical State – Liquid
Flammability (solid, gas)	No data available	Odor – None
Flammability Limits in Air		Appearance - Colorless
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Relative Density	No data available	
Specific Gravity	1.20	
Water Solubility	Complete	
Solubility in other solvents	No data available	
Partition coefficient: n-octanol/water	No data available	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	No data available	
Flammable Properties	Not flammable	
Explosive Properties	Not explosive	
Oxidizing Properties	Not an oxidizer	

Other information
VOC Content (%) 0%

10. STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
None known based on information supplied.

Incompatible materials
None known based on information supplied.

Hazardous decomposition products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

PRODUCT AS SOLD

Information on likely routes of exposure

Product Information:

Eye Contact	Causes serious eye damage.
Skin Contact	Causes severe skin burns.
Ingestion	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

PRODUCT AT USE DILUTION

Eye Contact	Causes serious eye damage
Skin Contact	Causes serious skin burns

Ingestion	Harmful if swallowed. Ingestion may cause gastrointestinal pain, nausea, vomiting, and diarrhea

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium Hydroxide	-	= 1350 mg/kg (Rabbit)	-
2-Propenoic acid, telomer with sodium hydrogen sulfite, sodium salt	= 2500 mg/kg (Rat)	-	-
Tetrasodium ethylenediamine tetraacetate	= 1780-2000mg/kg (Rat)	-	= 30 mg/L (Rat)

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available.
Mutagenic Effects No information available.
Carcinogenicity Contains no carcinogenic ingredients.

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity • - Product

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

LD50 Oral No information available.
LD50 Dermal No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium Hydroxide	-	LC50 96 h: = 45.4 mg/L static (Oncorhynchus Mykiss)	-	EC50 48 h: = 7.6 mg/L (Daphnia magna)
Tetrasodium ethylenediamine tetraacetate	EC50 72h: = 2.77 mg/L (Desmodesmus subspicatus	LC50 96 h: = 490 mg/L static (Bluegill Sunfish)		EC50 24h: = 610 mg/L (Daphnia magna)

Persistence and Degradability No information available.
Bioaccumulation No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

PRODUCT AS SOLD

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations
Contaminated Packaging Dispose of in accordance with federal, state, and local regulations.

PRODUCT AT USE DILUTION

Dispose of in accordance of the federal, state, local regulations.

14. TRANSPORT INFORMATION

DOT

UN NUMBER UN3266
Proper Shipping Name Corrosive Liquid, basic, inorganic, n.o.s.
Hazard Class 8

Packing Group	II
Reportable Quality	Sodium Hydroxide, RQ kg = 1055.81
Description	UN3266, Corrosive Liquid, basic, inorganic, n.o.s, (Sodium Hydroxide), 8,II, RQ
Emergency Response Guide Number	154

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Hydroxide	1000lb			X

CERCLA

This material, as supplied, contains substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium Hydroxide	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains no Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Sodium Hydroxide	X	X	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA **Health Hazard 3** **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** -

HMIS	**Health Hazard** 3	**Flammability** 0	**Physical Hazard** 0	**Personal Protection** B

Prepared By
Sunburst Chemicals

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General Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet