



SAFETY DATA SHEET

Issuing Date 28-Oct-2014

Revision Date 14-Sep-2015

Revision Number 1

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

GHS product identifier

Product Name Sentinel

Other means of identification

Product Code(s) 5160

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Sanitizer

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

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 Toxicity Oral and Skin	Category 3
Skin Corrosion/Irritation	Category 1B
Serious Eye Damage/Eye Irritation	Category 1

PRODUCT AT USE DILUTION


Acute Toxicity Oral	Category 4
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GHS Label elements, including precautionary statements

Emergency Overview

PRODUCT AS SOLD

Signal Word	Danger
Hazard Statements	<ul style="list-style-type: none">• Harmful if in contact with skin or if swallowed.• Causes severe skin burns and eye damage

	Appearance White	Physical State Solid	Odor Ammonia
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Precautionary Statements

Prevention

- Wear protective gloves / protective clothing / eye protection / face protection
- 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 15-20 minutes. Remove contact lenses, if present after 5 minutes. Continue rinsing eyes
- Immediately call a POISON CENTER or doctor/physician.

Skin

- IF ON SKIN: Wash with plenty of soap and water, rinse with water for 15 minutes
- 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 for treatment/advice.
- Rinse mouth
- Have person sip a glass of water if able to swallow
- Do NOT give anything by mouth to an unconscious person.
- Do not induce vomiting, unless told to so by a physician.


Storage

- Store locked up

Disposal

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

GHS Label elements, including precautionary statements

PRODUCT AT USE DILUTION			
Signal Word	Warning		
Hazard Statements			
• Harmful if swallowed	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.

Fire

- In case of fire: Use CO₂, dry chemical, or foam for extinction.

Storage

- Store locked up. Keep out of reach of children.

Disposal

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

Hazard Not Otherwise Classified (HNOC)**Other information**

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS**PRODUCT AS SOLD**

Chemical Name	CAS-No	Weight %	Trade secret
Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	85409-23-0	19 – 21%	*
Alkylbenzyltrimethylammonium chloride	68391-01-5	19 – 21 %	*
Urea	57-13-6	50 – 70%	*

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

PRODUCT AT USE DILUTION

Chemical Name	CAS-No	Weight %	Trade secret
Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	85409-23-0	0.007 – 0.020	*
Alkylbenzyltrimethylammonium chloride	68391-01-5	0.007 – 0.020	*
Urea	57-13-6	0.028 – 0.030	*

4. FIRST AID MEASURES**PRODUCT AS SOLD****Description of necessary first-aid measures****General Advice**

Immediate medical attention is required

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
Skin Contact	Wash skin and soap water. Remove and wash contaminated clothing before re-use. Get medical attention if irritation persists.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Irritation, burning sensation

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Probable mucosal damage may contraindicate use of gastric lavage.

PRODUCT AT USE DILUTION	
Eye Contact	Rinse immediately with plenty of water, also under eyelids for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention immediately.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Using a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Ingestion	Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Inhalation	Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. Water. Keep containers and surroundings cool with water spray.

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. Ensure adequate ventilation. Use personal protective equipment. High risk of slipping due to leakage / spillage of product.

Environmental Precautions

Environmental Precautions Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

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 Absorb spilled material with an absorbent material such as clay, sawdust, or sand. Flush area with flooding quantities of water.

PRODUCT AT USE DILUTION	
Personal Precautions, protective equipment and emergency precautions	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personal only. Refer to protective measure listed in section 7 and 8.
Environmental Precautions	Do not allow contact with soil, surface or ground water
Methods and materials for containment and cleaning up	Stop leak if safe to do so. Contain spillage, and then collect 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). Flush away traces with water. For large spills, dike spilled material or otherwise material to ensure runoff does not reach a waterway.

7. HANDLING AND STORAGE

PRODUCT AS SOLD
Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

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

Incompatible Products No information available

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 This product does not contain any hazardous materials with occupational exposure. Limits established by the region specified regulatory bodies

Appropriate engineering controls

Engineering Measures Eyewash Stations

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tightly fitting safety goggles.
Skin and Body Protection	Rubber gloves. Rubber apron.
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.

	PRODUCT AT USE DILUTION
Engineering Measures	Eyewash stations
Protection Measures	Personal protective equipment
Eye Protection	Wear tight fitting safety goggles.
Hand Protection	Wear protective gloves
Skin Protection	Suitable protective gloves and apron
Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

9. PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT AS SOLD

Information on basic physical and chemical properties

Physical State	Solid	Appearance	White
Odor	Ammonia		

	PRODUCT AT USE DILUTION		
Physical State	Liquid	Appearance	Colorless
Odor	None		

<u>Property</u>	<u>Values for Product as Sold</u>	<u>Values for Product at Use Dilution</u>
pH	N/A	7.5 – 8.5
Melting Point/Range	240 °F	
Boiling Point/Boiling Range	No data available	
Flash Point	No data available	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		
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	No data available	
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	
<u>Other information</u>		
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

Incompatible materials

None

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	Contact with eyes may cause serious eye damage.
Skin Contact	Contact with skin may cause chemical burns.
Ingestion	Gastrointestinal irritation, nausea, vomiting and diarrhea.

PRODUCT AT USE DILUTION

Eye Contact	Irritation, redness
Skin Contact	Irritation, redness
Ingestion	Nausea, burning sensation in mouth or throat

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness, pain, burning sensation

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

Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenicity	Not carcinogenic

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quaternary Ammonium Chlorides	344mg / kg (Rat) est.	3340 mg/kg (Rabbit) est.	*

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.
Inhalation	No information available
Vapor	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Urea		LC50: 16200-18300 mg/L Poecilia reticulata 96 h	EC50 = 23914 mg/L 5 min	EC50 48 h: = 3910 mg/L Static (Daphnia magna) EC50 24 h: > 10000 mg/L (Daphnia magna Straus)

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

Waste Disposal Methods	Dispose of in accordance of the federal, state, local regulations.
Contaminated Packing	Dispose of in accordance of the federal, state, local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies

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 Commercial Chemical Substances/EU List of Notified Chemical Substances

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.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced in Section 2, Hazards Information, of this Safety Data Sheet. The pesticide label also includes other important information, including direction for use.

PRODUCT AS SOLD

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

PRODUCT AT USE DILUTION	
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 no substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains no substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

U.S. State Regulations

California Proposition 65

This product contains no Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

None

U.S. EPA Label Information

EPA Pesticide Registration Number

670 - 1

16. OTHER INFORMATION

NFPA	Health Hazard 3	Flammability 0	Instability 0	Physical and Chemical Hazards - 1
HMIS	Health Hazard 3	Flammability 0	Physical Hazard 0	Personal Protection B

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General Disclaimer

The information provided on this MSDS 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