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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name

: Drewtrol™ 8199

BOILER WATER TREATMENT

™ Trademark, Solenis or its subsidiaries or affiliates,

registered in various countries

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Solenis LLC	Emergency telephone number 1-844-SOLENIS (844-765-3647) / 606-329-5705
500 Hercules Road Wilmington, Delaware 19808 United States of America	Product Information 1-844-SOLENIS (844-765-3647)
RegulatoryRequestsNA@solenis.com	

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Corrosive to Metals

: Category 1

Skin corrosion

: Category 1

Serious eye damage

: Category 1

GHS Label element

Hazard pictograms

Signal Word

: Danger

Hazard Statements

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage.

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Precautionary Statements

: Prevention:

Keep only in original container. Do not breathe dusts or mists. Wash skin thoroughly after handling.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

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.

Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Storage:

Store locked up.

Store in corrosive resistant stainless steel container with a

resistant inner liner.

Disposal:

Dispose of contents/ container to an approved waste disposal

plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
ACRYLIC POLYMER	254504001-5001	Eye Irrit. 2A; H319	>= 5.00 - < 10.00
		-	

Trade Secret Composition - conceal identity + concentration

SODIUM HYDROXIDE	1310-73-2	Met. Corr. 1; H290	>= 15.00 - < 20.00
		Skin Corr. 1; H314	

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	Eye Dam. 1; H318	

Trade Secret Composition - conceal concentration

SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled

: Move to fresh air.

If breathed in, move person into fresh air.

Keep patient warm and at rest.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact

: If on skin, rinse well with water.

Wash contaminated clothing before re-use.

In case of eye contact

: In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eye.

If swallowed

Get medical attention immediately.

Do NOT induce vomiting. Rinse mouth with water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

: Sulfur dioxide may be released if this material comes into contact with acids, water and/or ice. In contact with moisture, sulfur dioxide forms sulfuric acid which is corrosive to skin and

mucous membranes.

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through

the skin may include:

stomach or intestinal upset (nausea, vomiting, diarrhea)

irritation (nose, throat, airways)

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Cough

lung edema (fluid buildup in the lung tissue)

Difficulty in breathing

Causes serious eye damage.

Causes severe burns.

Notes to physician

: No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray

Foam

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: sodium monoxide

sodium sulfide residue

sulfur dioxide toxic fumes corrosive vapors Sodium oxides

carbon dioxide and carbon monoxide

Oxides of phosphorus

Specific extinguishing

methods

Product is compatible with standard fire-fighting agents.

Further information

: Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and : Use personal protective equipment.

Avoid dust formation.

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emergency procedures

Avoid breathing dust.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Environmental precautions

: Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

: Keep in suitable, closed containers for disposal.

Other information

: Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling

: Avoid dust formation.

Do not breathe vapours/dust. Container hazardous when empty. Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage

: Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	
		exposure)	Permissible	
			concentration	
ALKALINE	254504001- 6301	Ceiling	2 mg/m3	ACGIH
		Ceil_Time	2 mg/m3	NIOSH/GUID

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			E
	PEL	2 mg/m3	OSHA_TRA
			NS
	Ceiling	2 mg/m3	TN OEL

Engineering measures

: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment

Hand protection

Remarks

: The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection

: Wear chemical splash goggles and face shield to protect eyes

and skin from airborne dust.

Maintain eye wash station in immediate work area.

Skin and body protection

: Wear as appropriate:

Chemical resistant apron

Safety shoes

Dust impervious protective suit

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear. Wear resistant gloves (consult your safety equipment

supplier).

Hygiene measures

Avoid breathing dust.

Wash hands before breaks and at the end of workday.

When using do not eat or drink.

Ensure that eyewash stations and safety showers are close to

the workstation location. When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: amorphous

Physical state

: solid

Colour

: black

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Odour

: No data available

Odour Threshold

: No data available

рΗ

: No data available

Melting point/freezing point

No data available

Boiling point/boiling range

212 °F / 100 °C

(1,013.333333 hPa) Calculated Phase Transition Liquid/Gas

Flash point : Not applicable

Evaporation rate

: No data available

Flammability (solid, gas)

: No data available

Upper explosion limit

: No data available

Lower explosion limit

: No data available

Vapour pressure

: 32 hPa (25 °C)

Calculated Vapor Pressure

Relative vapour density

: No data available

Relative density

: No data available

Density

No data available

Solubility(ies)

Water solubility

No data available

Solubility in other solvents

No data available

Partition coefficient: n-

octanol/water

No data available

Thermal decomposition

: No data available

Viscosity

Viscosity, dynamic

No data available

Viscosity, kinematic

: No data available

Oxidizing properties

No data available

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SECTION 10. STABILITY AND REACTIVITY

Reactivity

: No decomposition if stored and applied as directed.

Chemical stability

: Stable under recommended storage conditions.

Possibility of hazardous

reactions

: Product will not undergo hazardous polymerization.

Conditions to avoid

: Keep away from heat, flame, sparks and other ignition

sources.

excessive heat Exposure to sunlight. Exposure to moisture

Incompatible materials

: Acids

alkalis

halogenated hydrocarbons

Metals nitrites

organic nitro compounds Strong oxidizing agents

sulphites water

Hazardous decomposition

products

carbon dioxide and carbon monoxide

corrosive vapors Oxides of phosphorus Sodium oxides

sodium sulfide residue

toxic fumes

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure

Skin contact Eye Contact

Ingestion

Acute toxicity

Not classified based on available information.

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Product:

Acute inhalation toxicity

: Remarks: Excessive heat or contact with acids, water and/or

ice, releases sulfur dioxide gas which may be harmful or

deadly if inhaled.

Components:

SODIUM HYDROXIDE:

Acute oral toxicity

: LD Lo (Rabbit): 500 mg/kg

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks: Causes severe skin burns and eye damage.

Components:

ACRYLIC POLYMER: Result: Not irritating to skin

Components:

SODIUM HYDROXIDE: Result: Corrosive to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage., Solutions may be severely irritating or cause burns.

Components:

ACRYLIC POLYMER: Result: Irritating to eyes

Components:

SODIUM HYDROXIDE: Result: Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

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STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: 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.

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.

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

: LC 50 (Oncorhynchus mykiss (rainbow trout)): 1,768 mg/l

Exposure time: 96 h Test Type: static test

LC 50 (Pimephales promelas (fathead minnow)): 1,708 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: LC 50 (Water flea (Ceriodaphnia dubia)): 770 mg/l

Exposure time: 48 h Test Type: static test

SODIUM HYDROXIDE:

Toxicity to fish

: LC 50 (Western mosquitofish (Gambusia affinis)): 125 mg/l

Exposure time: 96 h Method: Static Remarks: Mortality

Toxicity to daphnia and other : EC 50 (Water flea (Daphnia magna)): 34.59 - 47.13 mg/l

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aquatic invertebrates

Exposure time: 48 h Remarks: Intoxication

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Additional ecological

information

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice

: Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and

federal regulations.

Contaminated packaging

: Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

KEGOEATION					
ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD, QTY.
	<u> </u>	1	1		LID, GII.

U.S. DOT - ROAD

4 2 S	5OLG	?NIS.		Page: 12
SAFE		Trusted solutions. ATA SHEET		Revision Date: 01/25/2016
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™ Trad	lemark, S red in var	BOILER WATER TREATMENT olenis or its subsidiaries or affiliate ous countries	S,	Version: 1.2
UN	3262	Corrosive solid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8	li
J.S. DO	T - RAIL			
UN	3262	Corrosive solid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8	11
1 S DO	T _ INII AI	ND WATERWAYS		
UN	3262	Corrosive solid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8	II .
T RANSI UN	PORT CA 3262	NADA - ROAD CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)	8	1 l
ro a Nei	DODT CA	NADA DAU		
UN	3262	NADA - RAIL CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)	8	
NTFRN	ATIONAL	_ MARITIME DANGEROUS GOOD	os	
UN	3262		8	
NTFRN	IATIONAI	_ AIR TRANSPORT ASSOCIATIO	N - CAR	GO
UN	3262	Corrosive solid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8	II
NTERN	ΙΔΤΙΩΝΑΙ	L AIR TRANSPORT ASSOCIATIO	N - PAS	SENGER
UN	3262	Corrosive solid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)	8 8	

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MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	3262	SOLIDO CORROSIVO,	8	<u> </u>
		BASICO, INORGANICO, N.E.P.		
		(SODIUM HYDROXIDE)		

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no	
		İ

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
SODIUM HYDROXIDE	1310-73-2	1000	6250

SARA 311/312 Hazards

: Acute Health Hazard

SARA 313

Component(s)SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis)

reporting levels established by SARA Title III, Section 313.

California Prop 65

Proposition 65 warnings are not required for this product

based on the results of a risk assessment.

The components of this product are reported in the following inventories:

TSCA

: On TSCA Inventory

DSL

: All components of this product are on the Canadian DSL.

AUSTR

: On the inventory, or in compliance with the inventory

NZIOC

: On the inventory, or in compliance with the inventory

ENCS

: Not in compliance with the inventory

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KECL

: On the inventory, or in compliance with the inventory

PHIL

: On the inventory, or in compliance with the inventory

IFCSC

: On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

Registration: Trade Secret

Chemical Name	Identification number
ACRYLIC POLYMER	254504001-5001

SECTION 16. OTHER INFORMATION

Further information

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Full text of H-Statements referred to under sections 2 and 3.

H290	May be corrosive to metals.
H303	May be harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Further information

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by the Solenis Environmental Health and Safety Department.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

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CAS: Chemical Abstracts Service (Division of the American Chemical Society).

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

FG: Food grade

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement: Hazard Statement

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization

ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"

IMDG: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

logPow: octanol-water partition coefficient

LCxx: Lethal Concentration, for xx percent of test population

LDxx: Lethal Dose, for xx percent of test population. ICxx: Inhibitory Concentration for xx of a substance

Ecxx: Effective Concentration of xx N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement

PBT: Persistent, Bioaccumulative and Toxic

PPE: Personal Protective Equipment STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV: Threshold Limit Value TWA: Time-weighted average

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DOT: Department of Transportation

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act HMIRC: Hazardous Materials Information Review Commission

HMIS: Hazardous Materials Identification System

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

PMRA: Health Canada Pest Management Regulatory Agency

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System