SAFETY DATA SHEET

Issuing Date 16-May-2013 **Revision Date** 16-May-2013 **Revision Number** 0

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

GHS product identifier

Product Name JARDIAN

Other means of identification

Product Code(s) JARCON

UN-Number UN1759

Synonyms JARCON

Recommended use of the chemical and restrictions on use

Recommended Use Institutional dish machine detergent

Uses advised against No information available

Supplier's details

Supplier Address

Envirochem, Inc 425 Whitehead Ave South River, NJ

08882

TEL: 732-238-6700

Emergency telephone number

Emergency Telephone CHEM-TEL, INC.

Number 24 Hour Emergency Contact 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

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

Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 4
Skin Corrosion/Irritation	Category 1 Subcategory 1A
Serious Eye Damage/Eye Irritation	Category 1
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word	Danger

Hazard Statements

- Harmful if swallowed
- Harmful in contact with skin
- Causes severe skin burns and eye damage
- May cause respiratory irritation



Appearance White

Physical State Powder.

Odor No information available

Precautionary Statements

Prevention

- Wear protective gloves/protective clothing/eye protection/face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area

General Advice

• Immediately call a POISON CENTER or doctor/physician

Eves

- 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

- · Call a POISON CENTER or doctor/physician if you feel unwell
- · Wash contaminated clothing before reuse
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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
- 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

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms JARCON

Chemical Name	CAS-No	Weight %	Trade secret
Pentasodium triphosphate	7758-29-4	< 30	*
Sodium carbonate	497-19-8	< 25	*
Sodium metasilicate	6834-92-0	< 25	*
Sodium hydroxide	1310-73-2	< 25	*

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

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with soap and plenty of water. Remove and wash contaminated

clothing before re-use. Immediate medical attention is required.

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. Immediate medical attention is required.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

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

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Protect from irritating mists and corrosive solutions with pressure demand, self-contained respirator and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin,

eyes and clothing. Stop leak if you can do it without risk. If spilled, take caution, as material

can cause surfaces to become very slippery.

Environmental Precautions

Environmental Precautions Dispose of contents/container to an approved waste disposal plant.

Methods and materials for containment and cleaning up

Methods for Containment Stop leak if you can do it without risk

Methods for Cleaning Up Use NIOSH certified gas mask with canister for Chlorine. If possible, remove material to

open air and flood with water. Contain spill, dilute with water and neutralize as required.

Wash away small spills with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing

vapors or mists. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using

this product. Do not take internally. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room

temperature. Keep from freezing. Keep container closed when not in use.

Incompatible Products Strong oxidizing agents. Acids. Aluminium. Soft metals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face ProtectionChemical resistant goggles must be worn. Face-shield. **Skin and Body Protection**Rubber boots. Apron. Rubber gloves. Latex gloves

Respiratory Protection Particle filtering face piece

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Powder Appearance White

Odor No information available Odor Threshold No information available

Property Values Remarks/ - Method

pH 13.0 (4 % solution)

Melting Point/Range No data available None known

Boiling Point/Boiling Range	> 100 °C /> 212 °F	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Relative Density	No data available	None known
Specific Gravity	No data available.	None known
Water Solubility	100%	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/wate	erNo data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known

Flammable Properties Not flammable

Explosive Properties No data available Oxidizing Properties No data available

Other information

VOC Content (%) No data available

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

Incompatible products. Extreme heat. Keep away from direct sunlight.

Incompatible materials

Strong oxidizing agents. Acids. Aluminium. Soft metals.

Hazardous decomposition products

Chlorine gas. Toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye Contact Causes serious eye damage.

Skin Contact Harmful in contact with skin. Causes severe skin burns.

Ingestion Harmful if swallowed.

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 ingredient listed as a carcinogen.

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

Numerical measures of toxicity - Product

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

LD50 Oral1423 mg/kg; Acute toxicity estimate **LD50 Dermal**1350 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pentasodium triphosphate		LC50 48 h: = 1650 mg/L		
		(Leuciscus idus)		
Sodium carbonate	EC50 120 h: = 242 mg/L	LC50 96 h: 310 - 1220		EC50 48 h: = 265 mg/L
	(Nitzschia)	mg/L static (Pimephales		(Daphnia magna)
		promelas)		
		LC50 96 h: = 300 mg/L static		
		(Lepomis macrochirus)		
Sodium metasilicate		LC50 96 h: = 210 mg/L		EC50 96 h: = 216 mg/L
		(Brachydanio rerio)		(Daphnia magna)
		LC50 96 h: = 210 mg/L		
		semi-static (Brachydanio		
		rerio)		
Sodium hydroxide		LC50 96 h: = 45.4 mg/L		
		static (Oncorhynchus		
		mykiss)		

Persistence and Degradability No information available.

Bioaccumulation No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

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

Contaminated Packaging Do not re-use empty containers.

Chemical Name	California Hazardous Waste
Sodium carbonate	Corrosive
Sodium hydroxide	Toxic Corrosive

Revision Date 16-May-2013

14. TRANSPORT INFORMATION

DOT

UN1759

Proper shipping name Corrosive solids, n.o.s.

Hazard Class 8
Packing Group ||

Reportable Quantity (RQ) Sodium hydroxide: RQ kg= 2063.64

Description UN1759, Corrosive solids, n.o.s. (Sodium hydroxide), 8, II, RQ

Emergency Response Guide 154

Number

WPS-ENV-014 - JARDIAN

TDG

UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group ||

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

MEX

UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group ||

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

ICAO

UN-Number UN1759

Proper shipping name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group ||

Description UN1759, Corrosive solid, n.o.s., 8, II

IATA

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group II
ERG Code 8L

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

IMDG/IMO

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group II
EmS No. F-A, S-B

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

<u>RID</u>

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group II
Classification Code C10

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

<u>ADR</u>

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group II
Classification Code C10
Tunnel Restriction Code (E)

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II, (E)

ADR/RID-Labels 8

ADN

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group II
Classification Code C10
Special Provisions 274

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

Limited Quantity 1 kg

15. REGULATORY INFORMATION

International Inventories

IECSC -

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 not contain any 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
Chronic Health Hazard
No
Fire Hazard
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
Pentasodium triphosphate				Χ
Sodium hydroxide	1000 lb			Х

CERCLA

This material, as supplied, contains one or more 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
Pentasodium triphosphate	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Sodium hydroxide	1000 lb		RQ 1000 lb final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Pentasodium triphosphate		X	X		
Sodium hydroxide	Х	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 -
<u>HMIS</u>	Health Hazard	3	Flammability	0	Physical Hazard 0	Personal Protection X

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110

1-800-572-6501 16-May-2013 16-May-2013

Issuing Date Revision Date Revision Note Initial Release.

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