SAFETY DATA SHEET

1. Identification

Product identifier **Sodium Bisulfite Solution**

Other means of identification

SDS number 6126001

Recommended use Dechlorination and preservative

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	JCI Jones Chemicals Inc.	
Address	1765 Ringling Boulevard Sarasota, FL 34236 United States	
Telephone	General Information:	1-800-477-1078
Website	www.jcichem.com	
E-mail	Not available.	
Emergency phone number	CHEMTREC (USA):	1-800-424-9300
	CHEMTREC (CANADA):	1-800-567-7455

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Health hazards

Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Sensitization, skin	Category 1
Specific target organ toxicity, single exposure	Category 3 narcotic effects

Environmental hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

OSHA defined hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements

Signal word Danger

Hazard statement Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause drowsiness or dizziness.

Precautionary statement

Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response Specific treatment (see this label). 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 skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. 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.

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

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	No OSHA defined hazard classes. OSHA defined hazard class: May be corrosive to metals. Contact with most metals will generate flammable hydrogen gas. May be harmful if swallowed. May cause respiratory irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Sodium Bisulfite	Sodium hydrogen sulfite Sodium hydrosulfite	7631-90-5	20 - 40
Sodium hydroxide	Caustic soda Lye Soda lye	1310-73-2	1 - 3
Other components below reportable levels			60 - 80

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Immediately call a POISON CENTER or doctor/physician.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Duration of rinsing should be at least 20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Duration of rinsing should be at least 20 minutes. Call a physician or poison control center immediately.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Most important symptoms/effects, acute and delayed	May cause allergic skin reaction. May cause drowsiness or dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Causes severe skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties.
Indication of immediate medical attention and special treatment needed	Immediate medical attention is required. Could cause skin burns and eye damage. Provide general supportive measures and treat symptomatically. This product is a CNS depressant.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Toxic fumes, gases or vapors may evolve on burning.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	Evacuate area and fight fire from a safe distance. Move containers from fire area if you can do so without risk. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Not considered flammable.
Hazardous combustion products	Sulfur oxides (SOx). Sulfur dioxide. Sodium oxides.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Ventilate the contaminated area. Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Absorb spill with vermiculite or other inert material. Pick up and transfer to properly labelled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Use only outdoors or in a well-ventilated area. Avoid breathing mist or vapor. Avoid contact with eyes, skin and clothing. Label containers appropriately. Keep containers closed when not in use. Contaminated work clothing must not be allowed out of the workplace. Keep away from incompatibles, refer to section 10. Avoid release to the environment. Wash hands after handling and before eating. Wear protective gloves/clothing and eye/face protection. Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted.

Conditions for safe storage, including any incompatibilities Store locked up. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS). Store in a cool, dry place out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Material	Type	Value
Sodium Bisulfite (CAS Mixture)	TWA	5 mg/m3

Components	Type	Value
Sodium Bisulfite (CAS 7631-90-5)	TWA	5 mg/m3
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value
Sodium Bisulfite (CAS Mixture)	TWA	5 mg/m3

Components	Type	Value
Sodium Bisulfite (CAS 7631-90-5)	TWA	5 mg/m3
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Advice should be sought from glove suppliers.

Other	Wear suitable protective clothing and eye/face protection.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH approved respirator if there is a risk of exposure at levels exceeding the exposure limits. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Seek advice from respiratory protection specialists.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Colorless to light yellow.
Odor	Pungent, sulfer-like odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Decomposes
Flash point	Does not burn
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	32 mm Hg
Vapor density	0.62
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Molecular formula	H2-O3-S.Na
Oxidizing properties	No oxidizing properties.
pH in aqueous solution	3.5 - 5.5
Specific gravity	1.24

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions. Decomposes on heating.
Possibility of hazardous reactions	Hazardous polymerization does not occur. No dangerous reaction known under conditions of normal use.

Conditions to avoid	Contact with incompatible materials. Exposure to air. Keep away from heat, sparks and open flame. Elevated temperatures. Keep away from direct sunlight. Do not use in areas without adequate ventilation.
Incompatible materials	Strong oxidizing agents. Strong acids. Metals.
Hazardous decomposition products	None known, refer to hazardous combustion products in Section 5.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. May cause central nervous system effects.
Skin contact	Causes severe skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Most important symptoms/effects, acute and delayed	May cause allergic skin reaction. May cause drowsiness or dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Causes severe skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties.

Information on toxicological effects

Acute toxicity The below product data is the calculated ATE values for this mixture. Individual ingredient component data appears below the product mixture ATE values.

Product	Species	Test Results
Sodium Bisulfite (CAS Mixture)		
Acute		
Oral		
	Rat	3550 mg/kg (Calculated ATE)

Components	Species	Test Results
Sodium Bisulfite (CAS 7631-90-5)		
Acute		
Dermal		
	Rabbit	No Data in Literature
Inhalation		
	Rat	No Data in Literature
Oral		
	Rat	1420 mg/kg
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Dermal		
LD50	Rabbit	No Data in Literature
Inhalation		
LC50	Rat	No Data in Literature
Oral		
LD50	Rat	No Data in Literature

Skin corrosion/irritation	Hazardous by OSHA criteria. Skin corrosion/irritiation - Category 1 Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Hazardous by OSHA criteria. Serious eye damage/eye irritation - Category 1 Causes serious eye damage.
Respiratory or skin sensitization	
Respiratory sensitization	This product is not expected to cause respiratory sensitization.
Skin sensitizer	Hazardous by OSHA criteria. Skin Sensitization - Category 1. May cause an allergic skin reaction.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Sodium Bisulfite (CAS 7631-90-5) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Hazardous by OSHA criteria. Specific Target Organ Toxicity (STOT), Single Exposure: Category 3 . May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure Not classified as a specific target organ toxicity -repeated exposure.

Aspiration toxicity Not expected to be an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. None known or reported by the manufacturer.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Sodium Bisulfite (CAS 7631-90-5)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	240 mg/l, 96 hours
Sodium hydroxide (CAS 1310-73-2)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	40 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

Persistence and degradability Product is non-biodegradable, since it is an inorganic mineral product.

Bioaccumulative potential No data available.

Mobility in soil High water solubility indicates a high mobility in soil.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN2693

UN proper shipping name Bisulfites, aqueous solutions, n.o.s. (Sodium Bisulfite RQ = 5000)

Transport hazard class(es)

Class 8

Subsidiary risk -

Label(s) 8

Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions IB3, T7, TP1, TP28

Packaging exceptions	154
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN2693
UN proper shipping name	Bisulfites, aqueous solution, n.o.s. (Sodium Bisulfite)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	8L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN2693
UN proper shipping name	Bisulfites, AQUEOUS SOLUTION, N.O.S. (Sodium Bisulfite)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium Bisulfite (CAS 7631-90-5)	Listed.
Sodium hydroxide (CAS 1310-73-2)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Sodium Bisulfite (CAS 7631-90-5)
Sodium hydroxide (CAS 1310-73-2)

US. New Jersey Worker and Community Right-to-Know Act

Sodium Bisulfite (CAS 7631-90-5)
Sodium hydroxide (CAS 1310-73-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Sodium Bisulfite (CAS 7631-90-5)
Sodium hydroxide (CAS 1310-73-2)

US. Rhode Island RTK

Sodium Bisulfite (CAS 7631-90-5)
Sodium hydroxide (CAS 1310-73-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 3-3-2015

Version # 01

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
DOT: Department of Transportation
EC: Effective Concentration
HMIS: Hazardous Materials Identification System
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO: International Civil Aviation Organisation
IMDG: International Maritime Dangerous Goods
LC: Lethal Concentration
LD: Lethal Dose
MARPOL: Marine Pollution
NFPA: National Fire Protection Association
NIOSH: National Institute for Occupational Safety and Health>n>NOEC: No Observable Effect Concentration
NTP: National Toxicology Program
OECD: Organization for Economic Co operation and Development
OEL: National Occupational Exposure Limits
OSHA: Occupational Safety and Health Administration
PPE: Personal Protective Equipment
RCRA: Resource Conservation and Recovery Act
RQ: Reportable Quantity
RTECS: Registry of Toxic Effects of Chemical Substances
RTK: Right to Know
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average
VOC: Volatile Organic Compounds
WEL: Workplace Exposure Limit

Disclaimer

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Bibliography

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