

SAFETY DATA SHEET

Preparation Date: 04/28/2015

Revision date 3/15/2019

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: B1145
Product Name: BROMINE, REAGENT, ACS

Other means of identification

Synonyms: No information available
CAS #: 7726-95-6
RTECS # EF9100000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Gases)	Category 2
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Label elements

Danger

Hazard statements

Harmful if swallowed
 Fatal if inhaled
 Causes severe skin burns and eye damage

May be corrosive to metals



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

May be harmful if swallowed

Very toxic to aquatic life

Precautionary Statements - Prevention

- 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
- Wear respiratory protection
- Wear protective gloves/protective clothing/eye protection/face protection
- Keep only in original container

Precautionary Statements - Response

- Specific treatment is urgent (see .? on this label)*
- Immediately call a POISON CENTER or doctor/physician*
- Specific treatment (see .? on this label)*
- Absorb spillage to prevent material damage
- 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.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- Do NOT induce vomiting

Precautionary Statements - Storage

- Store in a well-ventilated place. Keep container tightly closed
- Store locked up
- Store in corrosive resistant/ .? container with a resistant inner liner

Precautionary Statements - Disposal

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Bromine	7726-95-6	100

4. FIRST AID MEASURES

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
- Skin Contact:** Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
- Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

Most important symptoms and effects, both acute and delayed

- Symptoms** Severe skin and eye irritation or burns
Causes eye damage

Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

- Unsuitable Extinguishing Media:** No information available.

Specific hazards arising from the chemical

- Hazardous combustion products** No information available.

- Specific hazards** Flammable in the form of liquid or vapor by spontaneous chemical reaction with reducing materials.
May cause fire in contact with wood, sawdust, cotton, straw, etc.
FLAMMABLE WITH ANTIMONY, BORON, CESIUM ACETYLENE CARBIDE, CHLOROTRIFLUOROETHYLENE, COPPER HYDRIDE,

CUPROUS ACETYLIDE, FLUORINE, GERMANIUM, LITHIUM CARBIDE, MAGNESIUM PHOSPHIDE, PHOSPHINE, PHOSPHORUS, PHOSPHORUS OXIDE, PHOSPHORUS TRIOXIDE, RUBIDIUM ACETYLENE CARBIDE, RUBIDIUM CARBIDE, & SODIUM ACETYLENE CARBIDE, STRONTIUM PHOSPHIDE & ZIRCONIUM DICARBIDE.

IT COMBINES READILY WITH POTASSIUM, PHOSPHORUS & TIN, & REACTION MAY BE ACCOMPANIED BY SPONTANEOUS IGNITION.

Warm germanium ignites in bromine vapor and antimony ignites in bromine vapor and reacts explosively with the liquid halogen. REACTS EXPLOSIVELY WITH ACETYLENE, ACRYLONITRILE, AMMONIA, DIMETHYL FORMAMIDE, ETHYL PHOSPHINE, HYDROGEN, ISOBUTYROPHENONE, NICKEL CARBONYL, NITROGEN TRIIODIDE, OZONE, OXYGEN DIFLUORIDE, PHOSPHORUS, POTASSIUM, SILVER AZIDE, SODIUM, & SODIUM CARBIDE.

Lithium is stable in contact with dry bromine, but heavy impact will initiate explosion, while sodium in contact with bromine needs only moderate impact for initiation.

Potassium ignites in bromine vapor and explodes violently in contact with liquid bromine and rubidium ignites in bromine vapor.

During preparation of praseodymium bromide, accidental contact of liquid bromine with small particles of praseodymium led to a violent explosion. (Bromine).

Special Protective Actions for Firefighters

Specific Methods:

No information available

Special Protective Equipment 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

Personal precautions, protective equipment and emergency procedures

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment

Stop leak if you can do it without risk. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up

Absorb spill with inert material (e.g. vermiculite, dry sand or earth). Use appropriate tools to put the spilled material in a suitable chemical waste disposal container.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Store at room temperature in the original container.

Incompatible Materials:

Combustible materials
Organic materials
Reducing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Bromine	7726-95-6	0.1 ppm TWA 0.7 mg/m ³ TWA	= 0.1 ppm TWA	= 0.2 ppm STEL	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Bromine	7726-95-6	= 0.1 ppm TWA = 0.7 mg/m ³ TWA	= 0.1 ppm TWA	0.1 ppm TWA	0.1 ppm TWAEV 0.66 mg/m ³ TWAEV 0.2 ppm STEV 1.3 mg/m ³ STEV

Australia and Mexico

Component	CAS No	Australia	Mexico
Bromine	7726-95-6	2 mg/m ³ STEL 0.3 ppm STEL 0.1 ppm TWA 0.66 mg/m ³ TWA	= 0.1 ppm TWA = 0.7 mg/m ³ TWA

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles Safety glasses with side-shields.
Skin and body protection:	Chemical resistant apron Gloves Long sleeved clothing
Respiratory protection:	Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: No information available.	Color: Reddish-Brown.
Odor: Pungent. Suffocating.	Taste No information available.	Formula Br ₂
Molecular/Formula weight (g/mole): 159.81	Flammability (solid, gas) no data available	Flashpoint (°C/°F): No information available
Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): -7.25°C/18.9°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 58.78°C/137.8°F	Bulk density: No information available	Density (g/cm³): No information available
Specific gravity: 3.11	pH No information available	Vapor pressure @ 20°C (kPa): 23.3
Evaporation rate: No information available	Vapor density: 7.1	VOC content (g/L): No information available
Odor threshold (ppm): 0.05	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Easily soluble in diethyl ether Very slightly soluble in cold water Freely soluble in alcohol, chloroform, carbon disulfide, carbon tetrachloride, concentrated hydrochloric acid, and aqueous solution of bromides	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with reducing agents, combustible materials, organic materials. Incompatible with organic compounds containing active hydrogen atoms adjacent to the carbonyl group (aldehydes, ketones, carboxylic acids). They may react violently in unmoderated contact with bromine. Also incompatible with diethyl zinc, potassium, germanium, rubidium, aluminum, mercury, titanium, liquid halogen, silane, acetylene, acrylonitrile, ammonia, dimethylformamide, ethyl phosphine, hydrogen, isobutyrophenone, nickel

carbonyl, nitrogen triiodide, ozone, oxygen difluoride, phosphorous, potassium, silver azide, sodium, sodium carbide, alkali hydroxides, arsenites, ferrous, mercurous salts, hypophosphites, and other oxidizable materials, saw dust, antimony, tin, boron, cesium acetylene carbide, chlorotrifluoroethylene, copper hydride, cuprous, acetylide, fluorine, lithium carbide, magnesium phosphide, phosphine, phosphorous oxide, phosphorus trioxide, rubidium acetylene carbide, rubidium carbide, sodium acetylene carbide, strontium phosphide, zirconium dicarbide, wood, cotton, straw. Bromine reacts violently in contact with natural rubber, but more slowly with some synthetic rubbers. Aluminum, mercury, or titanium react violently with dry bromine

Chemical stability

Stability: Stable at normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials.

Incompatible Materials: Combustible materials
Organic materials
Reducing agents

Hazardous decomposition products: No information available.

Other Information

Corrosivity: Highly corrosive in the presence of aluminum, of zinc
Highly corrosive in the presence of stainless steel (304)
Corrosive in presence of copper
Severe corrosive effect on Bronze
Corrodes iron, stainless steel, and copper

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Bromine	
CAS No	7726-95-6

LD50/oral/rat = 1700 mg/kg Oral LD50 Rat
LD50/oral/mouse = 3100 mg/kg Oral LD50 Mouse
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = 2700 mg/m³ Inhalation LC50
LC50/inhalation/mouse = 2900 mg/m³ Inhalation LC50 Mouse
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

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Value - Acute Tox = 1700 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 3100 mg/kg

LD50/dermal/rabbit

Value - Acute Tox = No information available

LD50/dermal/rat

VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = 2700 mg/m³

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = 2900 mg/m³

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:

Contact with liquid is corrosive and causes ulceration and skin burns. In milder cases, it might cause skin rash, pustles, measles-like eruptions, furuncles, and cold and clammy skin with cyanosis or pale color.

Eye Contact:

It is a lacrymator and causes eye irritation, eyelid inflammation at low concentration. At higher concentrations it may cause blepharospasm, photophobia, conjunctivitis, and burns.

Inhalation

Inhalation of smaller amounts may cause severe irritation of the respiratory tract with coughing, chest tightness, shortness of breath, and nosebleed. Inhalation of larger amounts may cause pulmonary edema, chemical pneumonitis, bronchospasm, pneumomediastinum, glottal spasm, glottal edema, inflammatory lesions in the mucous membranes, inflamed tongue and palate, chemical burns of the lungs, asthmatic bronchitis, and severe choking. Death may occur due to circulatory collapse, asphyxiation from edema of the glottis, aspiration pneumonia, or pulmonary edema. It may also affect behavior/central nervous system and gastrointestinal tract, cardiovascular system, thyroid. Symptoms may include dizziness, headache, fatigue, disturbances of sleep and sexual function, feeling of oppression, vertigo, anxiety, depression, muscle incoordination, emotional instability, delirium, stupor, vomiting, diarrhea, abdominal pain, tachycardia, hypotension.

Ingestion

May cause severe and permanent damage to the digestive tract. It may cause gastrointestinal tract burns, burning pain of the mouth and esophagus, corrosive gastroenteritis with vomiting, abdominal pain, diarrhea, and possible bloody feces. It may cause kidney damage (hemorrhagic nephritis with oliguria or anuria, and liver damage, brownish discoloration of lips, tongue and mucous membranes. It may also affect the cardiovascular system (tachycardia, hypotension, and cyanosis and behavior/central nervous system (symptoms similar to inhalation).

Aspiration hazard

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity

Inhalation and Ingestion: Prolonged or repeated exposure may affect respiration

and endocrine system (thyroid), metabolism, behavior/central nervous system, and cardiovascular system, and cause kidney and liver damage. Effects may be delayed. (Bromine).

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Bromine	7726-95-6	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Bromine	7726-95-6	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1744
Proper Shipping Name: Bromine
Hazard Class 8
Subsidiary Class 6.1
Packing group: I
Emergency Response Guide Number 154
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions 1, B9, B85, N34, N43, T22, TP2, TP10, TP13
Symbol(s): [DOT]: (+) - Fixes the proper shipping name, hazard class and packing group for that entry without regard to whether the material meets the definition of that class, packing group or any other hazard class.
Description: UN1744, Bromine, 8 (6.1), I

TDG (Canada)

UN-No: UN1744
Proper Shipping Name: Bromine
Hazard Class 8
Subsidiary Risk: (6.1)
Packing Group: No information available
Marine Pollutant No Information available
Description: Forbidden Forbidden for transport by passenger carrying vessel, passenger carrying road vehicle or passenger carrying railway vehicle

ADR

UN Number UN1744
Proper Shipping Name: Bromine
Transport hazard class(es) 8
Packing group I
Subsidiary Risk: 6.1
Description: UN1744, Bromine, 8 (6.1), I, ENVIRONMENTALLY HAZARDOUS

IMDG

UN-No: UN1744
Proper Shipping Name: Bromine
Hazard Class: 8
Subsidiary Risk: 6.1
Packing Group: I
Marine Pollutant No information available
EMS: F-A
Description UN1744, Bromine, 8 (6.1), I, Marine pollutant

RID

UN Number UN1744
Proper Shipping Name: Bromine

Transport hazard class(es) 8
Subsidiary Risk: 6.1
Packing group I
Description: UN1744, Bromine, 8 (6.1), I, ENVIRONMENTALLY HAZARDOUS

ICAO (air)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Risk: 6.1
Packing Group: No information available
Description: Forbidden
 Forbidden for transport

IATA

UN Number UN1744
Proper Shipping Name: Bromine
Transport hazard class(es) 8
Subsidiary Risk: 6.1
Packing group No information available
Precautionary Statements - Response No information available
Special Provisions No information available
Description: Forbidden
 Passenger Aircraft: Not permitted for transport
 Cargo Aircraft: Not permitted for transport

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
Bromine	7726-95-6	Present(ACTI VE)	Present KE-03605	Present	Not present	Present	Present	Present 231-778-1

U.S. Regulations

Bromine

- Massachusetts RTK: Present
- New Jersey RTK Hazardous Substance List: 0252
- New Jersey (EHS) List: 0252 500 lb TPQ
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- New Jersey TCPA - EHS: =1000lbTQ
- Pennsylvania RTK: Environmental hazard
- Pennsylvania RTK - Environmental Hazard List Present
- Pennsylvania RTK - Special Hazardous Substances Present
- Minnesota - Hazardous Substance List: Present
- New York Release Reporting - List of Hazardous Substances:
= 1 lb RQ
- California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Bromine	7726-95-6	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Bromine	7726-95-6	None	500 lb TPQ 500	None	None	1.0 % de minimis concentration

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Bromine	7726-95-6	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Bromine
7726-95-6 (100)

WHMIS 2015 Hazard Classification
Acute toxicity - Inhalation - Category 2: H330 Fatal if inhaled.;
Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.;
Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Bromine	7726-95-6	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Bromine	7726-95-6	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Bromine	7726-95-6	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Bromine	7726-95-6	

EU - CLP (1272/2008)

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R-phrase(s)

R26 - Very toxic by inhalation
R35 - Causes severe burns
R50 - Very toxic to aquatic organisms

S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.
S 1/2 - Keep locked up and out of the reach of children.
S 7/9 - Keep container tightly closed and in a well-ventilated place.

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Bromine	7726-95-6	T+; R26 C; R35 N; R50	No information	S1/2 S7/9 S26 S45 S61

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

C - Corrosive
T+ - Very toxic

16. OTHER INFORMATION

Preparation Date: 04/28/2015
Revision date 3/15/2019
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet