



SAFETY DATA SHEET

Preparation Date: 11/29/2016

Revision Date: 11/12/2016

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: A1145

Product Name: AMMONIUM BISULFITE, 45 PERCENT SOLUTION, REAGENT

Other means of identification

Synonyms: No information available

CAS #: Mixture

RTECS #: Not available

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.

<https://www.spectrumchemical.com>

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number: Chemtrec 1-800-424-9300

Contact Person: Martin LaBenz (West Coast)

Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

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

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Corrosive to metals	Category 1

Label elements

Danger

Hazard statements

Causes severe skin burns and eye damage

May cause respiratory irritation

May be corrosive to metals

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Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

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

Use only outdoors or in a well-ventilated area

Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

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. Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

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

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

Components	CAS-No.	Weight %
Water	7732-18-5	55
Ammonium Bisulfite	10192-30-0	45

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

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1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

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 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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. 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. Call a physician immediately.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	Severe skin and eye irritation or burns. Causes digestive (gastrointestinal) tract irritation. May cause gastrointestinal (digestive) tract burns. Irritating to respiratory system.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician:	Treat symptomatically.
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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:

ammonia; nitrogen oxides

Hazardous Combustion Products:

No information available.

Specific hazards:

No information available.

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:

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

Environmental precautions

Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not let product enter drains. Do not flush into surface water or sanitary sewer system. 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. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up

Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. 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 at room temperature in the original container. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents

Acids

Metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Water	7732-18-5	None	None	None	None
Ammonium Bisulfite	10192-30-0	None	None	None	None

Canada

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Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Ammonium Bisulfite	10192-30-0	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Water	7732-18-5	None	None
Ammonium Bisulfite	10192-30-0	None	None

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: Face-shield or Goggles

Skin and body protection: Chemical resistant apron. and. Long sleeved clothing. or. Chemical resistant protective suit. Gloves. Boots.

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: Clear.	Color: Colorless to pale yellow.
Odor: Slight. Sulfur dioxide odor.	Taste Acrid.	Formula: No information available
Molecular/Formula weight: No information available	Flammability: No information 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): No information available	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 102 °C/215.6 °F	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: 1.2-1.3	pH: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available

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Odor threshold (ppm): 5-50 (as ammonia)
Partition coefficient (n-octanol/water): No information available
Viscosity: No information available

Miscibility: No information available
Solubility: Easily soluble in cold water

10. STABILITY AND REACTIVITY

Reactivity:
No information available

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Incompatible materials.

Incompatible Materials:
Oxidizing agents
Acids
Metals

Hazardous decomposition products: Sulfur oxides. Ammonia.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Inhalation. Ingestion. Eyes.

Acute Toxicity

Component Information

Water	
CAS-No.	7732-18-5
LD50/oral/rat =	> 90 mL/kg Oral LD50 Rat
LD50/oral/mouse =	No information available
LD50/dermal/rabbit =	No information available
LD50/dermal/rat =	No information available
LC50/inhalation/rat =	No information available
LC50/inhalation/mouse =	No information available
Other LD50 or LC50 information =	No information available

Ammonium Bisulfite	
CAS-No.	10192-30-0
LD50/oral/rat =	No information available

LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
Value - Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
Value-Acute Tox Dermal = No information available

LD50/dermal/rat
Value -Acute Tox Dermal = No information available

LC50/inhalation/rat
Value-Vapor = No information available
Value-Gas = No information available
Value-Dust/Mist = No information available

LC50/Inhalation/mouse
Value-Vapor = No information available
Value - Gas = No information available
Value - Dust/Mist = No information available

Symptoms

Skin Contact: Severe skin irritation. Causes skin burns.

Eye Contact: Severe eye irritation. Causes eye burns.

Inhalation Irritating to respiratory system. Symptoms may include coughing and shortness of breath. It may cause pulmonary edema.

Ingestion Causes digestive (gastrointestinal) tract irritation. May cause digestive (gastrointestinal) tract burns.

Aspiration hazard No information available.

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

Chronic Toxicity Ingestion: May cause effects similar to those of acute ingestion.
Inhalation: Repeated exposure to low concentrations may cause bronchitis with cough, phlegm, and/or shortness of breath. May also cause liver and kidney damage, and affect the brain, and blood.
Eye: May cause corneal damage and the development of cataracts and glaucoma.
Skin: Repeated skin contact to low concentrations may cause dryness, itching, and redness (dermatitis).

Sensitization: No information available.

Mutagenic Effects: May affect genetic material
Mutations in microorganisms

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Ammonium Bisulfite	10192-30-0	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 Respiratory system.

STOT - repeated exposure No information available.

Target Organs: Skin. Eyes. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: 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

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes

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Water	7732-18-5	None	None	None	None
Ammonium Bisulfite	10192-30-0	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	UN2693
Proper Shipping Name:	Bisulfites, aqueous solutions, n.o.s.
Hazard Class:	8
Subsidiary Class	No information available
Packing group:	III
Emergency Response Guide Number	154
Marine Pollutant	No data available
DOT RQ (lbs):	5000 lbs./2270 kg RQ
Special Provisions	IB3, T7, TP1, TP28
Symbol(s):	No information available
Description:	UN2693, Bisulfites, aqueous solutions, n.o.s., 8, III, Limited quantity

TDG (Canada)

UN-No:	UN2693
Proper Shipping Name:	Bisulfites, aqueous solution, n.o.s.
Hazard Class:	8
Subsidiary Risk:	No information available
Packing Group:	III
Marine Pollutant	No Information available
Description:	UN2693, Bisulfites, aqueous solution, n.o.s., 8, III, Limited quantity

ADR

UN-No:	UN2693
Proper Shipping Name:	Bisulphites, aqueous solution, n.o.s.
Hazard Class:	8
Packing Group:	III
Subsidiary Risk:	No information available
Special Provisions	274
Description:	UN2693, Bisulphites, aqueous solution, n.o.s., 8, III, Limited quantity

IMO / IMDG

UN-No:	UN2693
Proper Shipping Name:	Bisulfites, aqueous solutions, n.o.s.
Hazard Class:	8
Subsidiary Risk:	No information available
Packing Group:	III
Marine Pollutant	No information available
EMS:	F-A
Special Provisions	274
Description:	UN2693, Bisulphites, aqueous solution, n.o.s. (AMMONIUM BISULFITE), 8, III, Limited quantity

RID

UN-No:	UN2693
Proper Shipping Name:	Bisulphites, aqueous solution, n.o.s.
Hazard Class:	8
Subsidiary Risk:	No information available
Packing Group:	III
Special Provisions	274
Description:	UN2693, Bisulphites, aqueous solution, n.o.s., 8, III, Limited quantity

ICAO

UN-No:	UN2693
Proper Shipping Name:	Bisulphites, aqueous solution, n.o.s.
Hazard Class:	8
Subsidiary Risk:	No information available
Packing Group:	III
Description:	UN2693, Bisulphites, aqueous solution, n.o.s., 8, III

IATA

UN-No:	UN2693
Proper Shipping Name:	Bisulphites, aqueous solution, n.o.s.
Hazard Class:	8
Subsidiary Risk:	No information available
Packing Group:	III
ERG Code:	8L
Special Provisions	No information available
Description:	UN2693, Bisulphites, aqueous solution, n.o.s., 8, III

15. REGULATORY INFORMATION**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Water	7732-18-5	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Ammonium Bisulfite	10192-30-0	Present	Present KE-32677	Present	Present (1)-399	Present	Present	Present 233-469-7

U.S. Regulations**Ammonium Bisulfite****Massachusetts RTK:** Present**New Jersey RTK Hazardous Substance List:** 0090**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present**Pennsylvania RTK:** Environmental hazard**Pennsylvania RTK - Environmental Hazard List** Present**Pennsylvania RTK - Special Hazardous Substances** Present**New York Release Reporting - List of Hazardous Substances:**

= 100 lb RQ

= 5000 lb RQ

Louisiana Reportable Quantity List for Pollutants: Listed**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)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Ammonium Bisulfite	10192-30-0	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA**Product code:** A1145**Product name:** AMMONIUM BISULFITE, 45 PERCENT SOLUTION, REAGENT**10 / 12**

Components	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
Water	7732-18-5	None	None	None	None	None
Ammonium Bisulfite	10192-30-0	= 5000 lb.; 2270 kg final RQ	None	None	Aqueous Ammonia from water dissociable ammonium salts	1%

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Water	7732-18-5	Not Applicable	Not Applicable
Ammonium Bisulfite	10192-30-0	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

E Corrosive material

Components

Water

WHIMHAZ

Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Ammonium Bisulfite	1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Ammonium Bisulfite	10192-30-0	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Ammonium Bisulfite	10192-30-0	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Ammonium Bisulfite	10192-30-0	Not listed

EU Classification

R-phrase(s)

R34 - Causes burns.

S -phrase(s)

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Water	7732-18-5		No information	
Ammonium Bisulfite	10192-30-0		No information	

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

Indication of danger:

C - Corrosive.



16. OTHER INFORMATION

Preparation Date: 11/29/2016
Revision Date: 11/12/2016
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