



SAFETY DATA SHEET

Preparation Date: 12/09/2016 Revision Date: 12/09/2016 Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: A1250

Product Name: AMMONIUM SULFIDE, LIGHT 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:
Uses advised against
No information available.
No information available

<u>Supplier:</u> Spectrum Chemical Mfg. Corp

14422 South San Pedro St.

Gardena, CA 90248 (310) 516-8000.

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

Emergency telephone numberChemtrec 1-800-424-9300Contact 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)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

Harmful if swallowed Harmful in contact with skin

Causes severe skin burns and eye damage

Flammable liquid and vapor



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

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

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

Keep away from h at/sparks/open flames/hot surf ces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/ .? /equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

In case of fire: Use CO2, dry chemical, or foam to extinguish.

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.

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

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/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 SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

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	76-80
Ammonium Sulfide	12135-76-1	20-24

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. First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect

themselves.

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. 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. Possible eye damage. Causes digestive

(gastrointestinal) tract irritation. May cause gastrointestinal (digestive) tract burns. May cause nausea and vomiting. May affect the cardiovascular system. Hypotension. Dyspnea (Shortness of breath and difficulty breathing). Respiratory depression. May cause cyanosis.

May cause central nervous system effects. May cause headache. May affect

behavior/central nervous system (tremor, convulsions).

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: Dry chemical. Carbon dioxide (CO2). Water spray mist or

foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Sulfur Oxides. Sulfur dioxide. Hydrogen sulfide.

Specific hazards: Flammable

Product code: A1250 Product name: AMMONIUM

SULFIDE, LIGHT SOLUTION,

REAGENT

Container explosion may occur under fire conditions or

when heated

Vapors may form explosive mixtures with air

Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers,

basements, tanks)

Vapor may travel considerable distance to source of

ignition and flash back

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For

larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

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. Keep people away from and upwind of spill/leak. Avoid

contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed

spaces.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Prevent

further leakage or spillage if safe to do so. Prevent product from entering drains.

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). In case of large spill, dike if needed. Dike far

ahead of liquid spill for later disposal.

Methods for cleaning upUse appropriate tools to put the spilled solid in a suitable waste disposal container.

Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials. Do not allow contact with water.

Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Product code: A1250 Product name: AMMONIUM 4 / 13 SULFIDE, LIGHT SOLUTION,

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 Zinc

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 Sulfide	12135-76-1	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Ammonium Sulfide	12135-76-1	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Water	7732-18-5	None	None
Ammonium Sulfide	12135-76-1	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

Product code: A1250

Eye protection: Goggles and Face-shield

Skin and body protection: Boots. Gloves. Chemical resistant apron. Long sleeved clothing. If working with

large quantities:. Chemical resistant protective suit.

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

Product name: AMMONIUM SULFIDE, LIGHT SOLUTION,

Physical state: Color: Appearance: Liquid No information available. Light yellow.

Odor: **Taste**

Rotten-egg like. No information available. No information available

Flash point (°C): Molecular/Formula weight: Flammability:

No information available No information available

Flashpoint (°C/°F): Flash Point Tested according to: Autoignition Temperature (°C/°F):

Formula:

60°C (140°F) Closed cup No information available

Lower Explosion Limit (%): Upper Explosion Limit (%): Melting point/range(°C/°F): No information available No information available No information available

Decomposition temperature(°C/°F): Boiling point/range(°C/°F): **Bulk density:**

No information available No information available No information available

Density (g/cm3): Specific gravity: :Ha

No information available No information available 1.04

Vapor pressure @ 20°C (kPa): **Evaporation rate:** Vapor density:

No information available No information available No information available

VOC content (g/L): Odor threshold (ppm): Partition coefficient No information available No information available (n-octanol/water): No information available

Viscosity: Miscibility: Solubility:

No information available Completely soluble in water No information available

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents Reactive with acids

Reacts with acids to form hydrogen sulfide

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

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

Incompatible Materials: Oxidizing agents

Acids Zinc

Hazardous decomposition Ammonia. Hydrogen Sulfide. Ammonium bisulfite. Nitrogen oxides (NOx). Sulfur

products: oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

Product code: A1250 Product name: AMMONIUM 6/13 SULFIDE, LIGHT SOLUTION,

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation. Skin.

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 infomation available

Other LD50 or LC50information = No information available

Ammonium Sulfide

CAS-No. 12135-76-1

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 infomation available

Other LD50 or LC50information = 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: Corrosive. Causes skin burns. May be absorbed through the skin and cause

hydrogen sulfide poisoning.

Eye Contact: Corrosive. Causes redness, swelling, pain, tearing, blurred vision. Causes eye

burns. Causes conjunctivitis. May cause corneal damage. May cause permanent

eye damage.

Inhalation Breathing Ammonium Sulfide can irritate the nose, throat and lungs causing

coughing, choking, and difficulty in breathing. Very high levels can cause you to feel dizzy, lightheaded, and to pass out. This product is a sulfide. Exposure to high concentration of sulfides can result in sudden collapse, convulsion, and death from respiratory paralysis. With less severe exposure to sulfides there may be somnolence, amnesia, unconciousness, delirium, & hallucinations, dysphagia, tachycardia, hypotension may also occur. The pupils may be non reactive and there may be strabismus, diplopia, and exophthalmos. Acute poisoning may also

be followed by bronchitis, or pneumonia, bradycardia, myocarditis, cardiac dilation,

peripheral neuropathy, gastrointestinal disturbances.

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

(gastrointestinal) tract burns. Ingestion may cause nausea, vomiting. May cause cyanosis, a bluish discoloration of the skin due to deficient oxygenation of the

blood. May affect respiration (respiratory depression). May affect the

cardiovascular system (hypotension). May affect behavior/central nervous system

(tremor, convulsions).

Aspiration hazard No information available.

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

Chronic Toxicity Chronic exposure to low concentrations may cause skin irritation, eye irritation,

headache, insomnia, bradycardia, loss of appetite, nausea, vomiting. It may also

damage the lungs, respiratory tract, eyes, lens, and cornea.

Sensitization: No information available.

Mutagenic Effects: No information available

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 Sulfide	12135-76-1	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

Product code: A1250 Product name: AMMONIUM

SULFIDE, LIGHT SOLUTION,

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure
STOT - repeated exposure
Target Organs:

No information available.
No information available.
No information available.

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

<u>Disposal Methods</u>

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
Water	7732-18-5	None	None	None	None
Ammonium Sulfide	12135-76-1	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN2683

Proper Shipping Name: Ammonium sulfide solution

Hazard Class: 8
Subsidiary Class 6.1 3
Packing group: II
Emergency Response Guide 132

Number

Marine PollutantNo data availableDOT RQ (lbs):100 lbs./45.4 kgSpecial ProvisionsIB1, T7, TP2, TP13

Symbol(s): [DOT]: (R3) - Identifies a material that is a hazardous substance that has a

reportable quantity (RQ) of 100 pounds (45.4 Kilograms).

Description: UN2683, Ammonium sulfide solution, 8 (6.1 3), II

TDG (Canada)

UN-No: UN2683

Product code: A1250 Product name: AMMONIUM 9 / 13
SULFIDE, LIGHT SOLUTION,

Proper Shipping Name: Ammonium sulfide solution

Hazard Class: 8

Subsidiary Risk: (3), (6.1)

Packing Group:

Marine Pollutant No Information available

Description: UN2683, Ammonium sulfide solution, 8 (3 6.1), II

ADR

UN-No: UN2683

Proper Shipping Name: Ammonium sulphide solution

Hazard Class: 8
Packing Group: ||
Subsidiary Risk: 3 + 6.1

Description: UN2683, Ammonium sulphide solution, 8 (3 6.1), II

IMO / IMDG

UN-No: UN2683

Proper Shipping Name: Ammonium sulfide solution

Hazard Class: 8
Subsidiary Risk: 3, 6.1
Packing Group: II

Marine Pollutant No information available

EMS: F-E

Description UN2683, Ammonium sulphide solution, 8 (3 6.1), II

RID

UN-No: UN2683

Proper Shipping Name: Ammonium sulphide solution

Hazard Class: 8
Subsidiary Risk: 3 + 6.1
Packing Group: ||

Description: UN2683, Ammonium sulphide solution, 8 (3 6.1), II

ICAO

UN-No: UN2683

Proper Shipping Name: Ammonium sulphide solution

Hazard Class: 8
Subsidiary Risk: 3, 6.1
Packing Group: ||

Description: UN2683, Ammonium sulphide solution, 8 (3 6.1), II

IATA

UN-No: UN2683

Proper Shipping Name: Ammonium sulphide solution

Hazard Class: 8
Subsidiary Risk: 3, 6.1
Packing Group: II
ERG Code: 8FP

Special Provisions No information available

Description: UN2683, Ammonium sulphide solution, 8 (3 6.1), II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines	Japan ENCS	CHINA	Australia	EINECS-No.
				(PICCS)			(AICS)	

Product code: A1250

Product name: AMMONIUM SULFIDE, LIGHT SOLUTION, REAGENT

Water	7732-18-5	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Ammonium Sulfide	12135-76-1	Present	Present KE-01710	Present	Present (1)-408 (1)-400	Present	Present	Present 235-223-4

U.S. Regulations

Ammonium Sulfide

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 0115

New Jersey - Discharge Prevention - List of Hazardous Substances: Present

Pennsylvania RTK: Environmental hazard

Pennsylvania RTK - Environmental Hazard List Present New York Release Reporting - List of Hazardous Substances:

5000 lb RQ 100 lb RQ

Louisana Reportable Quantity List for Pollutants: 100lbfinal RQ

45.4kgfinal RQ

California Directors List of Hazardous Substances: Present FDA - Direct Food Additives 21 CFR 172.515

FDA - 21 CFR - Total Food Additives 172.515

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		Female Reproductive
	ļ				Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Ammonium Sulfide	12135-76-1	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

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 Sulfide	12135-76-1	100 lb final RQ 45.4 kg final RQ	None	None	None	None

U.S. TSCA

Components		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 Sulfide	12135-76-1	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

B3 Combustible liquid D1B Toxic materials E Corrosive material

Components WHIMHAZ

Product code: A1250 Product name: AMMONIUM 11 / 13 SULFIDE, LIGHT SOLUTION,

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.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Ammonium Sulfide	12135-76-1	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances	
Water	7732-18-5	Not listed	
Ammonium Sulfide	12135-76-1	Not listed	
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject	
		to Mandatory Reporting	
Water	7732-18-5	Not listed	
Ammonium Sulfide	12135-76-1	Not listed	

EU Classification

R-phrase(s)

R34 - Causes burns.

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). 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 Sulfide	12135-76-1		No information	

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

Indication of danger:

C - Corrosive.



16. OTHER INFORMATION

Preparation Date:12/09/2016Revision Date:12/09/2016Prepared 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

Product name: AMMONIUM SULFIDE, LIGHT SOLUTION, REAGENT

Product code: A1250