



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


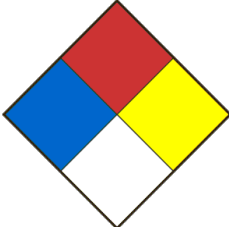
Fax. (Qc): (418) 660-8998

## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier AMMONIUM SULFIDE (20%wt in H <sub>2</sub> O)		Product Use Laboratory use	
Chemical formula (NH <sub>4</sub> ) <sub>2</sub> S+H <sub>2</sub> O		Product code AS-0102	Molar weight 68,14
Chemical name / Commercial name / Synonymous AMMONIUM MONOSULFIDE SOLUTION, DIAMMONIUM SULFIDE SOLUTION			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 9/30/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	Flammable liquids category 3 Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1
<b>Signal Word</b>	DANGER
<b>Hazards statements (H)</b>	H226 Flammable liquid and vapour. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
<b>Precautionary statements (P)</b>	P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ventilating/lighting equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P260 Do not breathe dust / fume / gas / mist / vapours / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment (see section 4 of the SDS and on this label). P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use dry powder for extinction. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
<b>PICTOGRAMS</b>	
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 3 <b>Fire</b> 3 <b>Reactivity</b> 0 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Sulfure d'ammonium	12135-76-1	20
Eau	7732-18-5	80

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	Yes
<b>Ignition conditions</b>	Heat, sparks and open flame.
<b>Suitable extinguishing media</b>	Use dry chemical powder, dry ice or foam. The water spray will then be used to cool nearby containers.
<b>Unsuitable extinguishing media</b>	Do not use a concentrated stream of water that could spread fire.
<b>Hazardous combustion / decomposition products</b>	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NO <sub>x</sub> ), Sulphur oxides Ammonia.
<b>Special fire and explosion hazards</b>	May react violently with incompatible products (Ref Section 10). Vapors may travel a great distance and ignite on sources of ignition such as heaters, electrical appliances, cigarettes, sparks, etc. Vapors may form explosive mixtures with air. Do not allow run-off from fire fighting to enter drains or water courses.
<b>Special protective equipment and precautions for firefighters</b>	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

## SECTION 06 - ACCIDENTAL RELEASE MEASURES

<b>Methods and materials for containment and cleaning up / Personnel precautions, protective equipment</b>	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Wear respiratory protection. Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Remove all sources of ignition. Avoid the accumulation of charges electrostatic. Do not let product enter drains. Discharge into the environment must be avoided.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Keep container tightly closed in a dry and well-ventilated place. Close all opened containers carefully and store vertically to avoid any flow. Use ventilation systems and electrical appliances that are grounded and do not produce any source of ignition. Never allow product to get in contact with water during storage. Do not store near acids.
<b>Methods of handling</b>	Avoid contact with the skin, eyes and clothes. Use a hood preferably. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Do not use tools that produce sparks.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Control	Value	Basis
AMONIUM SULFIDE 20% W/W IN WATER	121 35-76-1	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

## SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Liquid.
<b>Appearance</b>	Clair et jaune.
<b>Odour</b>	Odeur d'oeuf pourri.
<b>Odour threshold</b>	Data not available
<b>pH</b>	9.5.
<b>Melting point / Freezing point</b>	Data not available
<b>Initial boiling point</b>	Data not available
<b>Boiling range</b>	Data not available
<b>Flash point</b>	32°C
<b>Evaporation rate</b>	Data not available
<b>Flammability</b>	Yes
<b>Lower flammable / Explosive limit</b>	4%
<b>Upper flammable / Explosive limit</b>	46%
<b>Vapour pressure</b>	450 mmHg @ 20°C.
<b>Vapour density</b>	> 1.
<b>Relative density</b>	0.997g/cm <sup>3</sup>
<b>Solubility</b>	Miscible dans l'eau.
<b>Partition coefficient water/n-octanol</b>	Data not available
<b>Auto-ignition temperature</b>	Data not available
<b>Decomposition temperature</b>	env. 40°C
<b>Viscosity</b>	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Non-reactive under normal conditions.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Stable under normal conditions.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Heat, flames and sparks. High heat and high pH. Takes a dark color in the light.
<b>Incompatible material</b>	Strong oxidizing agents. Acids. Strong bases. Alkali metals. Aluminum, copper. Zinc.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx), Sulphur oxides Ammonia.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### AMMONIUM SULFIDE (20%WT IN H2O)

<b>Routes of exposure</b>	Ingestion, inhalation, skin and eyes.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
<b>- Eyes</b>	Irritation and burns that may cause permanent eye damage.
<b>- Skin</b>	May be harmful if absorbed through the skin. Provoke a skin irritation. Severe burns and tissue ulcerations.
<b>- Inhalation</b>	May be harmful if inhaled. Irritation of the mucous membranes and the respiratory system. The product is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Burning sensation, cough, dyspnea, headache, nausea, vomiting, dizziness, inflammation and edema of the larynx and bronchi, cyanosis, chemical pneumonitis and pulmonary edema that can be fatal.
<b>Acute toxicity (Ingestion)</b>	May be harmful if swallowed. Burns in the mouth, pharynx, the digestive tract and the gastrointestinal tract. The product is a corrosive material. Born not perform gastric lavage, do not induce vomiting. Check for lack of perforation Stomach or oesophageal: Ingestion causes severe swelling, serious injury to delicate fabrics and a danger of perforation.
<b>Chronic exposure effects / symptoms</b>	The product is extremely destructive of the tissues of the mucous membranes, upper respiratory tract, eyes and skin, spasm, inflammation and edema of the larynx, spasm, inflammation and bronchial edema, congestion Pulmonary edema, burning sensation, cough, asthma, laryngitis, respiratory failure, migraine, Nausea.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Data not available. LD50 Dermal - Data not available.
<b>CL50 (specify species and route of entry)</b>	LC50 - Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	LC50 - Cyprinus carpio (Carp) - 1.2 - 5.1 mg/L - 48 h.
<b>Persistence and degradability</b>	Persistence is unlikely based on information available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Probable mobility in the environment due to its solubility in water.
<b>Other adverse effects</b>	Very toxic to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
<b>Contaminated Packaging</b>	Dispose of as unused product.

## SECTION 14 - TRANSPORT INFORMATION

UN Number	2683
UN Proper shipping name	SULFURE D'AMMONIUM EN SOLUTION
Transport hazard class(es)	8 Corrosive substances 3 Flammable liquids 6.1 Toxic substances
Packing group	II
Limited quantity index	0,5L
ERAP Index	1000
Special precautions	-

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 3 Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1
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## SECTION 16 - OTHER INFORMATION

### Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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