

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product identifier:** AMMONIUM SULFATE LIQUID

**Synonyms:** LAS; Liquid Ammonium Sulfate, Ammonium Sulfate Solution

**Intended use:** Water and wastewater treatment, fertilizer, and other industrial uses.

**Uses Advised Against:** None known.


**Company Identification**  
DPC Industries, Inc.  
DPC Enterprises, LP  
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DX Terminals  
PO Box 24600  
Houston, TX 77229-4600

**Emergency**  
**CHEMTREC (USA)** (800) 424-9300

**24 hour Emergency Telephone No.** (281) 457-4888

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## 2. Hazard identification of the product

<b>Health hazards</b>	May be harmful if swallowed. Skin corrosion/irritation Serious eye irritation	Category 4 Category 2 Category 2a
<b>Label elements</b> Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.		
		
<b>Signal Word</b>	<b>Warning</b>	
<b>Hazard Statements</b>	Causes eye and skin irritation. Harmful if swallowed.	
<b>Precautionary Statements</b>		
<b>Prevention</b>	Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Use in well ventilated area. Do not breathe mist or vapor. Wash thoroughly after handling. Avoid release to the environment.	
<b>Response</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Contact medical personnel. IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with shower/ water. Wash contaminated clothing before reuse. If skin irritation, get medical attention. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - Continue rinsing. If irritation persists, get immediate medical attention.	
<b>Storage</b>	Do NOT freeze. Store in dry, well ventilated area. Keep container closed when not in use.	
<b>Disposal</b>	Dispose of contents / container in accordance with local / national regulations.	
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not known.	

## 3. Composition/information on ingredients

Substance classified with a health or environmental hazard.

Synonyms: LAS; Liquid Ammonium Sulfate, Ammonium Sulfate Solution

Ingredient/Chemical	CAS Number	Weight %
Ammonium Sulfate	7783-20-2	20 - 50

# Safety Data Sheet

## 4. First aid measures

### Description of first aid measures

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention.
<b>Eyes</b>	Irrigate copiously with clean fresh water for at least 15 minutes, holding the eyelids apart. If contact lenses are present, DO NOT delay irrigation until lenses are removed. Seek immediate medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. If irritation persists, seek medical attention. Do NOT reuse clothing until thoroughly cleaned.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. If victim is conscious, give a glass of water. Never give anything by mouth to an unconscious person. Contact a physician immediately.

### Most important symptoms and effects, both acute and delayed

<b>Overview</b>	Treat symptomatically.
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## 5. Fire-fighting measures

<b>Extinguishing media</b>	Use extinguishing agent suitable for type of surrounding fire.
<b>Unsuitable extinguishing media</b>	None known.
<b>Special hazards arising from the substance or mixture</b>	Forms sulfur trioxide, nitrogen and ammonia oxides.
<b>Advice for fire-fighters</b>	Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Move container from fire area if it can be done without risk. Avoid skin contact. Stay upwind.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Isolate area from unprotected personnel. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Dike to prevent spill from spreading. Collect with compatible absorbent and place in container with lid. Prevent entry into waterways, sewers, basements or confined areas. Floor may be slippery – use care and clean thoroughly.
<b>Environmental precautions</b>	Do not allow spills to enter drains or watercourses.
<b>Methods and material for containment and cleaning up</b>	Ventilate the area and avoid breathing vapors. Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. Do not allow spills to enter drains or watercourses. If drains, sewers, streams or lakes are contaminated, contact applicable regulatory agencies.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapors, mist or aerosols.
<b>Conditions for safe storage, including any incompatibilities</b>	Handle containers carefully to prevent damage and spillage. Store in a cool, dry, well ventilated place. Store away from incompatible materials described in Section 10. Keep containers closed when not in use.

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## 8. Exposure controls and personal protection

### Occupational exposure limits

CAS No.	Material	Source	Value
7783-20-2	Ammonium Sulfate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

### Individual protection measures, such as personal protective equipment

<b>Respiratory</b>	Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.
<b>Eyes</b>	Wear safety glasses with side shields or safety goggles to protect the eyes. An eye wash station is suggested as a good workplace practice.
<b>Skin</b>	Chemical resistant clothing such as coveralls/apron boots should be worn. Chemical impervious gloves. Emergency eyewash station should be in close proximity.
<b>Engineering Controls</b>	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable, respiratory protection must be worn. A safety shower/eye wash station is suggested as a good workplace practice.
<b>Other Work Practices</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

## 9. Physical and chemical properties

<b>Appearance</b>	Clear, colorless to pale yellow or amber liquid
<b>Odor</b>	None
<b>Odor threshold</b>	Not Applicable
<b>pH</b>	4 - 6
<b>Melting point / freezing point (°C)</b>	Not Measured
<b>Initial boiling point and boiling range (°C)</b>	102 C (215 F)
<b>Flash Point</b>	> 200 F
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Applicable
	<b>Upper Explosive Limit:</b> Not Applicable
<b>Vapor pressure (Pa)</b>	Not Measured
<b>Vapor Density</b>	Not Measured
<b>Specific Gravity</b>	1.20 - 1.25
<b>Solubility in Water</b>	Complete
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature (°C)</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured
<b>VOC %</b>	Not Measured

## 10. Stability and reactivity

<b>Reactivity</b>	Hazardous polymerization will not occur.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No data available.
<b>Conditions to avoid</b>	Incompatible products. Temperatures greater than 282oF (139oC) will cause decomposition with release of ammonia and sulfur trioxide. Heating or reacting with Alkali will cause Ammonia Flash.
<b>Incompatible materials</b>	Avoid strong oxidizing agents, alkalis, acids, chlorates, and nitrates.
<b>Hazardous decomposition products</b>	Forms sulfur trioxide, nitrogen and ammonia oxides.

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## 11. Toxicological information

Ingredient	Results	Species	Dose	Exposure
Ammonium Sulfate 7783-20-2	LD50 Oral	Rat	2840 mg/kg	-
	LD50 Dermal			
	LC50 Inhalation			

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Item	Hazard
<b>Acute Toxicity (mouth)</b>	Not Applicable
<b>Acute Toxicity (skin)</b>	Not Applicable
<b>Acute Toxicity (inhalation)</b>	Not Applicable
<b>Skin corrosion/irritation</b>	Contact with skin will result in irritation.
<b>Eye damage/irritation</b>	Contact will cause eye irritation.
<b>Sensitization (respiratory)</b>	Not Applicable
<b>Sensitization (skin)</b>	Not Applicable
<b>Germ toxicity</b>	Not Applicable
<b>Carcinogenicity</b>	Not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.
<b>Reproductive Toxicity</b>	None expected.
<b>Specific target organ systemic toxicity</b>	Not Applicable
<b>Specific target organ systemic Toxicity</b>	Not Applicable
<b>Aspiration hazard</b>	Not Applicable

## 12. Ecological information

### Aquatic Ecotoxicity

Ingredient	LC50/96 hr fish, mg/l	EC50/48hr crustacea, mg/l	EC50/72hr algae, mg/l
Ammonium Sulfate (7783-20-2)	75.5 Mozambique tilapia	Not Available	Not Available

<b>Persistence and degradability</b>	Dissociates into potassium and nitrate ions in the environment.
<b>Bioaccumulative potential</b>	Not expected.
<b>Mobility in soil</b>	No data available.
<b>Results of PBT and vPvB assessment</b>	This product contains no PBT/vPvB chemicals.
<b>Other adverse effects</b>	No data available.

## 13. Disposal considerations

<b>Disposal instructions</b>	Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations. Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.
<b>Waste from material</b>	The waste determination should be made in discussion between the user and the waste disposal company.
<b>Container Management</b>	Empty containers or liners may retain some product residues. Empty containers should be taken for local recycling, recovery or waste disposal.

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## 14. Transport information

<b>Transport hazard class(es)</b>	
<b>DOT (Domestic Surface Transportation)</b>	
<b>DOT Proper Shipping Name:</b>	Not regulated
<b>DOT Hazard Class</b>	Not Applicable
<b>DOT Label:</b>	None
<b>UN / NA Number:</b>	Not Applicable
<b>DOT Packing Group:</b>	Not Applicable
<b>CERCLA/DOT RQ:</b>	Not Applicable
<b>Environmental hazards:</b>	IMDG: Marine Pollutant: No
<b>Special precautions for user:</b>	Not Applicable

## 15. Regulatory information

<b>Regulatory Overview:</b>	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) Inventory.	
<b>US EPA Tier II Hazards:</b>	<b>Fire:</b>	No
	<b>Sudden Release of Pressure:</b>	No
	<b>Reactive:</b>	No
	<b>Immediate (Acute):</b>	Yes
	<b>Delayed (Chronic):</b>	No
<b>SARA 302 Extremely Hazardous Substance:</b>		No
<b>SARA 311/312 Chemicals :</b>		No
<b>SARA 313 (TRI)</b>		No
<b>CAA Section 112 Hazardous Air Pollutant</b>		No
<b>CAA Section 112R Risk Management Plan</b>		No
<b>State Regulations:</b>	<b>N.J. RTK Substances (&gt;1%)</b>	Listed
	<b>Penn RTK Substances (&gt;1%)</b>	Listed
	<b>California Prop 65</b>	Not listed

## 16. Other information

**Revision Information:** This is the first revision of this SDS format, changes from previous revision not applicable.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

THE USER IS CAUTIONED TO PERFORM HIS OWN HAZARD EVALUATION AND TO RELY ON HIS OWN DETERMINATIONS.