



**MATERIAL SAFETY DATA SHEET**

**Ammonium Sulphate, NSF Grade**

**Section 01 - Chemical And Product And Company Information**

Product Identifier ..... Ammonium sulphate, NSF grade

Product Use ..... Fertilizer, water treatment, disinfectant

Supplier Name ..... ClearTech Industries Inc.  
2302 Hanselman Avenue  
Saskatoon, SK Canada  
S7L 5Z3

Prepared By ..... ClearTech Industries Inc. Technical Department  
Phone: (306)664-2522

Preparation Date ..... September 21, 2006

24-Hour Emergency Phone ..... 306-664-2522

**Section 02 - Composition / Information on Ingredients**

Hazardous Ingredients ..... Ammonium sulphate 99-100%

CAS Number ..... Ammonium sulphate 7783-20-2

Synonym (s) ..... Ammonium sulphate fertilizer, diammonium sulphate, sulphuric acid  
diammonium salt

**Section 03 - Hazard Identification**

Inhalation ..... Injury is unlikely. Dust may cause upper respiratory tract irritation.

Skin Contact / Absorption ..... May cause skin irritation.

Eye Contact ..... Dust may cause mild to moderate eye irritation.

Ingestion ..... Low to moderate toxicity. Ingestion of large amounts may cause injury.



**Exposure Limits**..... Treat as nuisance particulate. TLV (ACGIH and Saskatchewan OEL) = 10 mg/m<sup>3</sup> of total dust, 5 mg/m<sup>3</sup> of respirable dust.

**Section 04 - First Aid Measures**

**Inhalation**..... Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.

**Skin Contact / Absorption**..... Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.

**Eye Contact**..... Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.

**Ingestion**..... Give large amounts of water and induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

**Additional Information**..... Not available

**Section 05 - Fire Fighting**

**Conditions of Flammability**..... Non-flammable

**Means of Extinction**..... Product does not burn. Where fire is involved, use any fire fighting agent appropriate for surrounding material; use water spray to cool fire-exposed surfaces.

**Flash Point**..... Not applicable

**Auto-ignition Temperature**..... Not applicable

**Upper Flammable Limit** ..... Not applicable

**Lower Flammable Limit**..... Not applicable

**Hazardous Combustible Products**... In a fire situation, decomposition products of ammonium sulphate include ammonia and sulphur oxides.

**Special Fire Fighting Procedures**..... Wear NIOSH-approved self-contained breathing apparatus and protective clothing.



Explosion Hazards..... Not applicable

**Section 06 - Accidental Release Measures**

Leak / Spill..... Wear appropriate personal protective equipment. Ventilate area. Stop or reduce leak if safe to do so. Prevent material from entering sewers.

Deactivating Materials..... Not available.

**Section 07 - Handling and Storage**

Handling Procedures..... Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

Storage Requirements..... Store in a cool, dry, well-ventilated place. Keep container tightly closed, and away from incompatible materials.

**Section 08 - Personal Protection and Exposure Controls**

**Protective Equipment**

Eyes..... Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.

Respiratory..... Respiratory protection is not normally required. If use creates dust formations, then a NIOSH-approved respirator with a dust cartridge is recommended.

Gloves..... Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Clothing..... Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Footwear..... No special footwear is required other than what is mandated at place of work.

**Engineering Controls**



- Ventilation Requirements**..... Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided. Supply sufficient replacement air to make up for air removed by exhaust systems.
- Other**..... Use general or local mechanical exhaust ventilation to control dust and to meet TLV requirements.

### Section 09 - Physical and Chemical Properties

- Physical State**..... Solid
- Odor and Appearance**..... Colourless to white crystals
- Odor Threshold**..... Not available
- Specific Gravity (Water=1)**..... 1.77
- Vapor Pressure (mm Hg, 20C)**..... Not available
- Vapor Density (Air=1)**..... Not available
- Evaporation Rate**..... Not available
- Boiling Point**..... Not applicable
- Freeze/Melting Point**..... Decomposes at 235°C
- pH**..... 5.2 (5% solution)
- Water/Oil Distribution Coefficient**.... Not available
- Bulk Density**..... 1100 kg/m<sup>3</sup>
- % Volatiles by Volume**..... Not available
- Solubility in Water**..... 729 g/L
- Molecular Formula**..... (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>
- Molecular Weight**..... 132

### Section 10 - Stability and Reactivity

- Stability**..... Stable under normal conditions. When heated above 235°C, ammonium sulphate decomposes liberating ammonia and sulphur oxides.



Incompatibility..... Sodium hydroxide

**Hazardous Products of Decomposition.** Contact with sodium hydroxide liberates ammonia gas.

Polymerization..... Will not occur.

**Section 11 - Toxicological Information**

Irritancy..... Mild irritant

Sensitization..... Not available

**Chronic/Acute Effects**..... Prolonged or repeated skin exposure may cause mild skin irritation.

**Synergistic Materials**..... Not available

**Animal Toxicity Data**..... LD<sub>50</sub>(oral, rat): 3000mg/kg

**Carcinogenicity**..... Not known to be a carcinogenic.

**Reproductive Toxicity**..... Not available

**Teratogenicity**..... Not available

**Mutagenicity**..... Not available

**Section 12 - Ecological Information**

**Fish Toxicity**..... TL<sub>m</sub>(Daphnia magna, 24 hrs): 423mg/L

**Biodegradability**..... Not available

**Environmental Effects**..... Not available

**Section 13 - Disposal Consideration**

**Waste Disposal**.....Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.



**Section 14 - Transportation Information**

**TDG Classification**

**Class**..... Not regulated

**Group**..... Not regulated

**PIN Number**..... Not regulated

**Other**..... Secure containers (full and/or empty) with suitable hold down devices during shipment.

**Section 15 - Regulatory Information**

**WHMIS Classification**.....Not a controlled product

**NOTE: THE PRODUCT LISTED ON THIS MSDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS MSDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.**

**NSF Certification**.....Product is certified under ANSI/NSF Standard 60 for disinfection and oxidation at a maximum dosage of 25 mg/L

**Section 16 - Other Information**

**Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.**

**ClearTech Industries Inc. - Locations**

**Corporate Head Office: 2302 Hanselman Avenue, Saskatoon, SK, S7L 5Z3  
Phone: 306-664-2522  
Fax: 306-665-6216**

[www.ClearTech.ca](http://www.ClearTech.ca)

Location	Address	Postal Code	Phone Number	Fax Number
Richmond, B.C.	12431 Horseshoe Way	V7A 4X6	604-272-4000	604-272-4596
Calgary, AB.	5516E - 40 <sup>th</sup> St. S.E.	T2C 2A1	403-279-1096	403-236-0989
Edmonton, AB.	11750 - 180 <sup>th</sup> Street	T5S 1N7	780-452-6000	780-452-4600
Saskatoon, SK.	2302 Hanselman Avenue	S7L 5Z3	306-933-0177	306-933-3282
Regina, SK.	555 Henderson Drive	S42 5X2	306-721-7737	306-721-8611
Winnipeg, MB.	340 Saulteaux Crescent	R3J 3T2	204-987-9777	204-987-9770



Mississauga, ON	7480 Bath Road	L4T 1L2	905-612-0566	905-612-0575
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**24 Hour Emergency Number - All Locations - 306-664-2522**