



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – PRODUCT IDENTIFICATION AND USE

Page 1 of 3

**PRODUCT IDENTIFIER:** AMMONIUM SULPHATE

**PRODUCT USE:** Fertilizer **SUPPLIER'S NAME:** Agrisol Manufacturing Inc.

**ADDRESS** 220 – 7565, 132 Street  
Surrey, BC,  
V3Z 1K7, Canada

**Emergency Phone No:** 1(604) 805-2417

## SECTION 2 – HAZARDOUS INGREDIENTS

| HAZARDOUS INGREDIENTS | CAS #     | LD <sub>50</sub> OF INGREDIENT<br>(SPECIFY SPECIES & ROUTE) |
|-----------------------|-----------|---|
| Ammonium Sulphate     | 7783-20-2 | LD <sub>50</sub> (oral, rat) 3000 mg/kg                     |

## SECTION 3 – PHYSICAL DATA

|                                    |  |   |  |
|------------------------------------|--|---|--|
| <b>PHYSICAL STATE:</b>             | Solid  | <b>ODOUR &amp; APPEARANCE</b>                 | Odourless, colourless or white crystals.         |
| <b>ODOUR THRESHOLD (ppm):</b>      | NAP  | <b>VAPOUR PRESSURE (0mmHg): @ 20°C</b>        | NAP  |
| <b>VAPOUR DENSITY (air=1):</b>     | NAP  | <b>BULK DENSITY</b>                           | 1100 kg/cm <sup>3</sup> (67 lb/cf <sup>3</sup> ) |
| <b>pH:</b>                         | 5.2 (5% solution)                                      | <b>FREEZING/MELTING POINT (°C)</b>            | Decomposes @ 235 °C                              |
| <b>SPECIFIC GRAVITY (water =1)</b> | 1.77   | <b>EVAPORATION RATE: (Butyl Acetate =1.0)</b> | NAP  |
| <b>MOLECULAR WEIGHT/FORMULA</b>    | 132 ((NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> ) | <b>SOLUBILITY (in water):</b>                 | Soluble in water (729 g/L)                       |

## SECTION 4 – FIRE AND EXPLOSION DATA

**FLAMMABLE:** Not flammable.

**IF YES, UNDER WHAT CONDITIONS?** NAP

**MEANS OF EXTINCTION:** Explosion may occur if ammonium sulphate is mixed with strong oxidizer. This material does not burn. Where fire is involved, use any fire fighting agent appropriate for surrounding material. Use water spray to cool fire-exposed surface.

**SPECIAL PROCEDURES:** Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

### EXPLOSION HAZARDS

|   |  |   |   |
|---|--|---|---|
| <b>FLASHPOINT (°C) &amp; METHOD:</b>        | Does not flash                                     | <b>AUTOIGNITION TEMPERATURE (°C)</b>        | NAP   |
| <b>LOWER FLAMMABLE LIMIT (% by volume):</b> | NAV  | <b>UPPER FLAMMABLE LIMIT (% by volume):</b> | NAV   |
| <b>SENSITIVITY TO IMPACT:</b>               | Not expected to be sensitive to mechanical impact. | <b>SENSITIVITY TO STATIC DISCHARGE:</b>     | Not expected to be sensitive to static discharge. |

NAP: Not applicable NAV: Not available TWA: Time weighted average

# MATERIAL SAFETY DATA SHEET

Page 2 of 3

**HAZARDOUS COMBUSTION PRODUCTS:**

In a fire situation, decomposition products of ammonium sulphate include ammonia and sulphur oxide at 235 °C.

## SECTION 5 – REACTIVITY DATA

**CHEMICAL STABILITY:**

Stable under normal conditions. When heated above 235 °C, it decomposes releasing ammonia and sulphur oxide.

**INCOMPATIBILITY:**

Sodium hydroxide

**CORROSIVE BEHAVIOUR:**

NAV

**CONDITIONS TO AVOID:**

None

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Contact with sodium hydroxide releases ammonia gas.

## SECTION 6 – TOXICOLOGICAL PROPERTIES

**ROUTES OF ENTRY:**

**SKIN CONTACT:**

Yes

**EYE CONTACT:**

Yes

**INHALATION:**

Yes

**INGESTION:**

Yes

**EFFECTS OF ACUTE EXPOSURE TO PRODUCT:**

**INGESTION:**

May cause sore throat, vomiting, abdominal pain or diarrhea.

**INHALATION:**

May cause nose, throat and respiratory tract irritation.

**EYE CONTACT:**

May cause mild irritation & redness to eyes.

**SKIN**

May cause skin irritation with prolonged contact.

**CONTACT:**

**EFFECTS OF CHRONIC EXPOSURE:** No chronic hazards are known. Not listed by NTP, IARC or OSHA as carcinogen.

**EXPOSURE LIMITS:** Treat as nuisance particulate (10 mg/m<sup>3</sup> of total dust, 5 mg/m<sup>3</sup> of respirable dust)

**IRRITANCY:**

May be mildly irritating to eyes.

**SENSITIZATION:**

None known

**SYNERGISTIC PRODUCTS:**

None known

## SECTION 7 – PREVENTIVE MEASURES

**PERSONAL PROTECTIVE EQUIPMENT:**

**Respiratory Protection:** Normally not required. If there is a chance of dust creation, then use NIOSH-approved respirator with dust cartridge is recommended.

**Eye Protection:** Use chemical safety goggles. Contact lenses should not be worn.

**Skin Protection:** Wear impervious gloves of chemically resistant material.

**Clothing's:** Body suits, apron or coverall of chemical resistant material should be worn at all time.

**Footwear:** No special footwear is required, but those mandated for work place.

**ENGINEERING CONTROLS:**

General exhaust & ventilation is adequate. Safety shower and eyewash station should be near the work station.

**HANDLING PROCEDURES:**

Avoid breathing dust.

Promptly clean up spills. Apply normal industrial hygiene and housekeeping practices. Minimize air borne spreading of dust.

**STORAGE REQUIREMENTS:**

Store in a dry, cool and well ventilated place and away from incompatible materials (oxidizers).

**MATERIAL SAFETY DATA SHEET**

Page 3 of 3

|                                  |  |
|----------------------------------|--|
| <b>LEAK AND SPILL PROCEDURE:</b> | Sweep or vacuum spilled product. Prevent material from entering sewers. Observe all environmental regulations. |
| <b>WASTE DISPOSAL:</b>           | Dispose of waste material in accordance with local, provincial and federal regulations.                        |

**SECTION 8 – FIRST AID MEASURES**

|                      |  |
|----------------------|--|
| <b>INHALATION:</b>   | Move the victim to fresh air. Give artificial respiration <i>ONLY</i> if breathing has stopped. If there is no breathing is difficult, give oxygen. Seek immediate medical attention.                |
| <b>SKIN CONTACT:</b> | Start flushing while removing contaminated clothing. Use water and soap to thoroughly wash affected areas. Obtain medical advice if irritation, redness, or burning sensation develops and persists. |
| <b>EYE CONTACT:</b>  | Flush eyes immediately for 15 minutes with running water and hold eyelids open. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention...         |
| <b>INGESTION:</b>    | Give large amount of water and induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.  |

**SECTION 9 – DEPARTMENT OF TRANSPORTATION****SHIPPING INFORMATION****US and Canada:** Not regulated**International Shipping:** Not regulated**TDG:** Not regulated.**IATA:** Not regulated**SECTION 10 – PREPARATION DATE OF MSDS**

**PREPARED BY:** Agrisol Manufacturing Inc.  
220 – 7565, 132 Street  
Surrey, BC,  
V3Z 1K7, Canada

**ADDITIONAL INFORMATION:**

At the time of preparation, the information and data contained in this MSDS are believed to be accurate and have been compiled from sources that are believed to be reliable.

**BUSINESS NUMBER:** 604-805-2417**DATE:** October, 2015