AMMONIUM NITRATE-SULFATE MIXTURE

CAUTIONARY RESPONSE INFORMATION

Common Synonyms
Mixed fertilizers

Solid: Grayish-white, Odorless

Sinks and mixes with water.

Stop discharge if possible. Keep people away. Call fire department. Avoid contact with solid and dust. Isolate and remove discharged material. Notify local health and pollution control agencies. Protect water intakes.

3.  HEALTH HAZARDS

3.1 Personal Protective Equipment: Self-contained breathing apparatus must be used when fighting fires. At other times a dust mask is adequate.

3.2 Symptoms Following Exposure: Inhalation causes irritation of nose and throat. Contact with eyes causes irritation.

3.3 Treatment of Exposure: INHALATION: move to fresh air. EYES: flush with water for 15 min.

3.4 TLV-TWA: Not listed.

3.5 TLV-STEL: Not listed.

3.6 TLV-Ceiling: Not listed.

3.7 Toxicity by Ingestion: Grade 3; oral rat LD50 = 58 mg/kg (ammonium sulfate)

3.8 Toxicity by Inhalation: Currently not available.

3.9 Chronic Toxicity: Currently not available.

3.10 Vapor (Gas) Irritant Characteristics: Not pertinent

3.11 Liquid or Solid Characteristics: Currently not available

3.12 Odor Threshold: Odorless

3.13 IDLH Value: Not listed.

3.14 OSHA PEL-TWA: Not listed.

3.15 OSHA PEL-STEL: Not listed.

3.16 OSHA PEL-Ceiling: Not listed.

3.17 EPA AEGL: Not listed

4.  FIRE HAZARDS

4.1 Flash Point: Not flammable

4.2 Flammable Limits in Air: Not pertinent

4.3 Fire Extinguishing Agents: Water

4.4 Fire Extinguishing Agents Not to Be Used: Steam, inert gases, foam, dry chemical

4.5 Special Hazards of Combustion: Products: Toxic and irritating oxides of nitrogen may form in fires.

4.6 Behavior in Fire: Will increase intensity of fire when in contact with combustible material. Containers may explode.

4.7 Auto Ignition Temperature: Not pertinent

4.8 Electrical Hazards: Not pertinent

4.9 Burning Rate: Not pertinent

4.10 Abnormal Flame Temperature: Not pertinent

4.11 Stoichiometric Air to Fuel Ratio: Not pertinent

4.12 Flame Temperature: Not pertinent

4.13 Combustion Molar Ratio (Reactant to Product): Currently not available

4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

5.  CHEMICAL REACTIVITY

5.1 Reactivity with Water: No reaction

5.2 Reactivity with Common Materials: Corrodes metals to same degree as hydrochloric acid; the reaction is not hazardous.

5.3 Stability During Transport: Stable

5.4 Neutralizing Agents for Acids and Corrosives: Not pertinent

5.5 Polymerization: Not pertinent

5.6 Inhibitor of Polymerization: Not pertinent

6.  WATER POLLUTION

6.1 Aquatic Toxicity: Currently not available

6.2 Water/Soil Toxicity: Currently not available

6.3 Biological Oxygen Demand (BOD): Currently not available

6.4 Food Chain Concentration Potential: None

6.5 GESAMP Hazard Profile: Not listed

7.  SHIPPING INFORMATION

7.1 Grades of Purity: Several grades of varying composition, all of which contain less than 70% of ammonium nitrate, the only hazardous ingredient.

7.2 Storage Temperature: Ambient

7.3 Inert Atmosphere: Ventilated (natural)

7.4 Venting: Open

7.5 IMO Pollution Category: Currently not available

7.6 Ship Type: Currently not available

7.7 Barge Hull Type: Currently not available

8.  HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Oxidizer

8.2 49 CFR Class: 5.1

8.3 49 CFR Package Group: III

8.4 Marine Pollutant: None

8.5 NFPA Hazard Classification: Not listed

8.6 EPA Reportable Quantity: Not listed

8.7 EPA Pollution Category: Not listed

8.8 RCRA Waste Number: Not listed

8.9 EPA FWPCA List: Not listed

9.  PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15° C and 1 atm: Solid

9.2 Molecular Weight: Not pertinent

9.3 Boiling Point at 1 atm: Not pertinent

9.4 Freezing Point: Not pertinent

9.5 Critical Pressure: Not pertinent

9.6 Critical Temperature: Not pertinent

9.7 Specific Gravity: 1.8 at 20°C (solid)

9.8 Liquid Surface Tension: Not pertinent

9.9 Liquid Water Interfacial Tension: Not pertinent

9.10 Vapor (Gas) Specific Gravity: Not pertinent

9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent

9.12 Latent Heat of Vaporization: Not pertinent

9.13 Heat of Combustion: Not pertinent

9.14 Heat of Decomposition: Currently not available

9.15 Heat of Solution: Currently not available

9.16 Heat of Polymerization: Not pertinent

9.17 Heat of Fusion: Currently not available

9.18 Limiting Value: Currently not available

9.19 Reid Vapor Pressure: Currently not available

NOTES

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<th>Saturated Liquid Density</th>
<th>Liquid Heat Capacity</th>
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