

AMMONIUM PICRATE, WET

API

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Ammonium carbazate Ammonium picrate (yellow) Ammonium picronitrate Phenol, 2,4,6-trinitro-, ammonium salt	Solid Yellow Sinks and slowly mixes with water.
<p>AVOID CONTACT WITH SOLID. KEEP PEOPLE AWAY. Wear self-contained positive pressure breathing apparatus and full protective clothing. Evacuate area in case of large discharge. Stop discharge if possible. Shut off ignition sources. Call fire department. Isolate and remove discharged material. Notify local health and pollution control agencies.</p>	
Fire	<p>Flammable POISONOUS GASES ARE PRODUCED IN FIRE OR WHEN HEATED. DRIED MATERIAL MAY EXPLODE IF EXPOSED TO HEAT, FLAME OR SHOCK. CONTAINERS MAY EXPLODE IN FIRE. Wear self-contained positive pressure breathing apparatus and full protective clothing. Evacuate area in case of significant discharge. Combat fire from protected location. Flood discharge area with water. Cool exposed containers with water.</p>
Exposure	<p>CALL FOR MEDICAL AID. DUST Toxic via inhalation and percutaneous absorption. Irritating to eyes, skin and mucous membranes. Move victim to fresh air. If in eyes or on skin, flush with running water for at least 15 minutes; hold eyelids open if appropriate. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.</p> <p>SOLID POISONOUS IF SWALLOWED OR ABSORBED THROUGH SKIN. Irritating to eyes and skin. IF IN EYES OR ON SKIN, flush with running water for at least 15 minutes. Hold eyelids open if appropriate. Use soap or mild detergent on skin. Remove and isolate contaminated clothing and shoes at the site. If SWALLOWED and victim is CONSCIOUS, have victim drink water and induce vomiting. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim quiet and maintain normal body temperature.</p>
Water Pollution	HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. May be dangerous if it enters nearby intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS Stop discharge	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Currently not available; Not pertinent 2.2 Formula: C ₆ H ₂ (NO ₂) ₃ ONH ₄ 2.3 IMO/UN Designation: 4.1/1310 2.4 DOT ID No.: 1310 2.5 CAS Registry No.: 131-74-8 2.6 NAERG Guide No.: 113 2.7 Standard Industrial Trade Classification: 51455
3. HEALTH HAZARDS	
<p>3.1 Personal Protective Equipment: Wear self-contained positive pressure breathing apparatus and full protective clothing. 3.2 Symptoms Following Exposure: An allergen. Irritating to eyes, skin and mucous membranes. Toxic via inhalation, ingestion and percutaneous absorption. Repeated low grade exposures may cause headache, pruritis, skin eruptions, yellowing of skin and conjunctiva, vomiting, diarrhea, and oliguria. Severe human poisonings, resulting from ingestion of one or two grams of material, may be characterized by gastroenteritis, hemorrhagic nephritis with anuria, acute hepatitis, progressive stupor, coma, and death. 3.3 Treatment of Exposure: INHALATION: Move victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. EYES OR SKIN: Immediately flush affected area with running water for at least 15 minutes; hold eyelids open if appropriate. Wash skin with soap or mild detergent. Remove and isolate contaminated clothing and shoes at the site. INGESTION: Immediately give victim large quantities of water and have him induce vomiting by touching a finger to the back of the throat. If victim is unconscious or having convulsions, do nothing except keep victim quiet and maintain normal body temperature. 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Currently not available 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: May cause liver and kidney damage. 3.10 Vapor (Gas) Irritant Characteristics: Currently not available 3.11 Liquid or Solid Characteristics: Irritating to skin and eyes. 3.12 Odor Threshold: Currently not available 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</p>	

4. FIRE HAZARDS

- 4.1 **Flash Point:** Currently not available
4.2 **Flammable Limits in Air:** Not pertinent
4.3 **Fire Extinguishing Agents:** Fight fire from an explosion-resistant location. In advanced or massive fire, the area should be evacuated. If fire occurs in the vicinity of this material, water should be used to keep containers cool. Do not move cargo or vehicle if cargo has been exposed to heat. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this action is impossible, withdraw from the area and let the fire burn.
4.4 **Fire Extinguishing Agents Not to Be Used:** Currently not available
4.5 **Special Hazards of Combustion Products:** Contain highly toxic NOx fumes.
4.6 **Behavior in Fire:** Flammable solid. UNCONFINED material burns without detonation when ignited. Confined material will explode upon heating to its ignition temperature.
4.7 **Auto Ignition Temperature:** Currently not available
4.8 **Electrical Hazards:** Currently not available
4.9 **Burning Rate:** Currently not available
4.10 **Adiabatic Flame Temperature:** Currently not available
4.11 **Stoichiometric Air to Fuel Ratio:** Currently not available
4.12 **Flame Temperature:** Currently not available
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:** Reacts with metals, concrete, and plaster to produce salts of picric acid that are much more sensitive to shock than ammonium picrate. Rate of reactivity with metal is increased by the presence of water.
5.3 **Stability During Transport:** Stable
5.4 **Neutralizing Agents for Acids and Caustics:** Wet down with water and dike for later disposal. Ammonium picrate should be disposed of only by explosives experts.
5.5 **Polymerization:** Not pertinent
5.6 **Inhibitor of Polymerization:** Not pertinent

6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:** 220 ppm/96 hr/bluegill sunfish/LC₅₀/fresh water
66 ppm/96 hr/menidia beryllina (fish)/LC₅₀/synthetic seawater
6.2 **Waterfowl Toxicity:** Currently not available
6.3 **Biological Oxygen Demand (BOD):** Currently not available
6.4 **Food Chain Concentration Potential:** Currently not available
6.5 **GESAMP Hazard Profile:** Not listed

7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** 90%; 10% water (minimum)
7.2 **Storage Temperature:** Ambient
7.3 **Inert Atmosphere:** Not listed
7.4 **Venting:** Not pertinent
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:** Flammable solid (10% or more water)
8.2 **49 CFR Class:** 4.1
8.3 **49 CFR Package Group:** I
8.4 **Marine Pollutant:** No
8.5 **NFPA Hazard Classification:** Not listed
8.6 **EPA Reportable Quantity:** 10
8.7 **EPA Pollution Category:** A
8.8 **RCRA Waste Number:** P009
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:** 246.14
9.3 **Boiling Point at 1 atm:** Not pertinent (decomposes)
9.4 **Freezing Point:** Not pertinent
9.5 **Critical Temperature:** Not pertinent
9.6 **Critical Pressure:** Not pertinent
9.7 **Specific Gravity:** 1.719 at room temperature
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:** -4,941 Btu/lb = -2,745 cal/g = -115x10³ J/kg
9.14 **Heat of Decomposition:** Not pertinent
9.15 **Heat of Solution:** Not pertinent
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:** Not pertinent

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
50 75 100 125 150 175 200	0.652 1.355 2.814 5.844 12.136 25.205 52.346		N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T