

material safety data sheet

#1401

AMMONIA INHALANT SOLUTION

CHEMTREC 24 HR EMERGENCY PHONE: 800-424-9300

NOTE: The CHEMTREC emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals. All non-emergency questions should be directed to JAC at 908-362-9266.

Section I -- Product Identification

Product Name: Ammonia Inhalant Solution
 MSDS Effective Date: April 4, 1997
 Manufactured For: Dynarex Corporation
 Address: 845 Route 94, Blairstown, NJ 07825
 Synonyms: N/A
 D.O.T. Shipping Name: Flammable Liquid, Corrosive, N.O.S. 3 - UN2924, PGH (Ammonia, Ethanol)
 NFPA Ratings: Health: 3
 Flammability: 3
 Instability: 1

Section II -- Hazardous Ingredients

COMPONENTS	CAS NUMBER	%	-----OSHA-----		-----ACGIH-----	
			PEL/TWA	PEL/STEL	TLV/TWA	TLV/SREL
Ammonia	7664-41-7	17.5	Not listed	35 ppm	25 ppm	35 ppm
Ethyl Alcohol	64-17-5	37.5	1000 ppm	Not listed	1000 ppm	Not listed

Section III -- Physical Data

Color/Odor/Appearance: Clear, pink to light red liquid; pungent odor of ammonia.
 Boiling Point: N/A for mixtures
 Melting Point: Unkown
 Specific Gravity: 0.891 25/25
 Vapor Pressure: Unkown

% Volatiles by Vol.: 55%
Solubility in Water: Very Soluble
Evaporation Rate: (Butyl Acetate=1): Unknown
ph: Unknown

Section IV -- Fire and Explosion Information

Flash Point: Less than 50° F
Test Method: Pensky Martens Closed Cup
Auto Ignition Temperature: Ammonia: 1204° F (651° C), Ethyl Alcohol: 685° F (363° C)
Flammable Limits in Air % by Volume: Lower: Unknown Upper: Unknown
Extinguishing Media: "Alcohol Resistent" foam, CO₂ or dry chemical

SPECIAL FIREFIGHTING PROCEDURES:

NOTE: Individuals should perform firefighting procedures for which they have been trained. Remove all sources of ignition. Move exposed containers from fire area if it can be done without risk. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Spray extinguishing media directly into base of flames. Water may be used to keep fire-exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARD:

When heated, mixture will give off ammonia gas, a strong irritant to eyes, respiratory tract, and mucous membranes. Other toxic gases produced are oxides of nitrogen, carbon monoxide, carbon dioxide and hydrogen. Closed containers exposed to heat may develop preeure and explode. Alcohol vapors are heavier than air and may travel a considerable distance to a source of ignition and fl back. Alcohol burn with a pale blue flame, which may be extremely hard to see under normal lighting conditions. Personnel may be able to feel the heat of the fire without seeing flames. Extreme caution mu be exercised in fighting alcohol fires.

Section V -- Health Hazard Information

Primary Routes of Exposure: Inhalation, eye contact, skin contact, and ingestion
Signs and Symptoms of Overexposure: Inhalation: Irritation or burns of the respiratory system, headache, coughing, lung congestion or inflammation, pulmonary edema, breathing difficulty. Headache, dizziness, drowsiness, loss of appetite and an inability to concentrate.
Eye contact: Severe irritation or burns, may lead to blindness.
Skin contact: Local irritation, dry skin, burns.
Ingestion: Burning pain in mouth, throat, constriction of throat, coughing, followed by nausea, vomiting or diarrhea. Ingestion ma prove fatal.
Medical Conditions Aggravated by Exposure: Individuals with pre-existing nervous system disorders, skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects of overexposure.

Section VI -- Emergency and First Aid Procedures

- For Inhalation:** Remove subject immediately to fresh air. Give artificial respiration if victim is not breathing. If breathing is difficult, give oxygen. Get immediate medical attention.
- For Eye Contact:** Immediately flush eyes with copious amounts of water for at least 15 minutes. Eyelids should be held apart and away from eyeball for thorough rinsing. Do not permit victim to rub eyes. Get immediate medical attention.
- For Skin Contact:** Immediately flush skin with copious amounts of water at least 15 minutes while removing contaminated clothing and shoes. Do not rub. Apply ointment to affected area. Obtain medical attention if irritation persists. Wash clothing before re-use.
- For Ingestion:** Contact a Poison Control Center immediately. Do NOT induce vomiting if conscious, have victim swallow large amounts of water. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

Section VII -- Toxicity Data

None of the components present in this formulation are currently classified as carcinogens in the NTP Annual Report on Carcinogens, IARC Monographs or by OSHA.

Section VIII -- Personal Protection

- Storage Requirements:** Protect containers from physical damage. Detached or outside storage is preferred. Inside storage should be in an NFPA approved flammable liquids storage room or cabinet. Store in corrosion-proof area at temperatures below 77 degrees F (25° C). Do not store in direct sunlight. Isolate from incompatible materials. Keep containers tightly closed.
- Handling Requirements:** All ignition sources should be eliminated. Remove closure carefully. Internal pressure may be present. Keep closure up to prevent leakage. When contents are being transferred, metallic containers must be bonded to the receiving container and grounded to avoid static discharges. Never use pressure to empty containers. Replace closure carefully after each opening.
- Ventilation:** Not required for product (JAC unit dose inhalant) use. When handling bulk material, use general or local exhaust ventilation to meet TLV requirements. Where engineering controls are not feasible or sufficient to achieve full conformance acceptable exposure limits. Use NIOSH approved respiratory protection equipment. Care must be taken to assure that any respirator chosen is capable of protecting the user from both ammonia and ethyl alcohol vapors. In some cases

a self-contained breathing apparatus may be advisable.

Eye Protection: Not required for product (JAC unit dose inhalant) use. When handling bulk material, always wear gas-tight, splash-proof chemical safety goggles meeting OSHA 29 CFR 1910.133 specifications.

Skin Protection: Not required for product (JAC unit dose inhalant) use. Use rubber gloves, protective suit, face shield and overshoes when handling bulk product.

Section IX -- Hazardous Reactivity

Reactivity: Stable at room temperature. Hazardous polymerization will not occur. However, product will react exothermically with acids. Releases ammonia vapor when heated. Ammonia component will decompose to hydrogen and oxides of nitrogen when heated. Carbon monoxide gas may also be produced when heated.

Condition To Avoid: Sunlight, heat (heating above ambient temperatures causes the vapor pressure of the solution to increase). Avoid mixing with acids, most common metals, strong oxidizing agents, brass, zinc, chlorine, aluminum, copper, bronze, mercury, dimethyl sulfate and acetyl chloride.

Section X -- Spill, Leak and Disposal Procedures

For large spills, stop leak if you can do so without risk. Extinguish all sources of ignition. Wear self-contained breathing apparatus, chemical safety goggles and full protective clothing. Ventilate area. Spill liquids should be contained and not washed into sewers or ground water. Contain by diking with non-combustible absorbent materials and place residue in DOT approved waste container.

Comply with all applicable local, state and federal regulations on spill reporting, handling and disposal of waste.

Other Precautions: Containers, even those that have been emptied, will retain product residue and vapors. Handle empty containers as if they were full.

Prepared By: David Robinson

Title: Vice President

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Disclaimer:

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