

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration
MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communications Standard.
29CFR 1910.1200. Standard must be consulted for specific requirements.

SECTION I

MANUFACTURER'S NAME/REPACKAGED BY: James Alexander/Certified Safety Mfg., Inc.	TELEPHONE NO. (816) 483-9090
ADDRESS: 1400 Chestnut Avenue Kansas City, Missouri 64127	
IDENTITY (AS USED ON LABEL): Ammonia Inhalant Ampoule	DATE PREPARED: 10/06/2010
	DATE REVIEWED:

SECTION II – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (Specific Chemical Identity; Common Name(s)):					
	%	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	
Ammonia	CAS# 7664-41-7	17.5%	50ppm	25ppm	TLV/STEL 35ppm
Ethanol	CAS# 64-17-5	37.5%	1000ppm	1000ppm	Not Listed
THIS PRODUCT IS PRODUCED AS A HEALTH CARE ITEM "FOOD, DRUG OR COSMETIC, INTENDED FOR PERSONAL CONSUMPTION BY EMPLOYEES WHILE IN THE WORKPLACE" TO WHICH THE HAZARDOUS COMMUNICATIONS REQUIREMENTS OF; 29CFR1910.1200 (A) & (B) DO NOT APPLY, AS SPECIFICALLY STATED IN 29CFR 1910.1200 (B) (5) (V)					

SECTION III – PHYSICAL DATA

BOILING POINT (°F):	N/A for mixtures	SPECIFIC GRAVITY (H₂O= 1):	0.891 25/25
VAPOR PRESSURE (mm Hg.):	Unknown	MELTING POINT:	Unknown
VAPOR DENSITY (AIR=1)	Unknown	EVAPORATION RATE (Butyl Acetate=1):	Unknown
SOLUBILITY IN WATER:	Very Soluble	% VOLATILES BY VOL.:	55%
pH	Unknown		
APPEARANCE AND ODOR: Clear, pink to light red liquid. Pungent ammonia odor .			

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): <50°F (closed cup)	FLAMMABLE LIMITS: LEL: Unknown UEL: Unknown
AUTOIGNITION TEMP: Ammonia 1204° F (651°C); Ethyl Alcohol: 685° F (363°C)	
EXTINGUISHING MEDIA: "Alcohol resistant" foam, CO ₂ or dry chemical.	
SPECIAL FIRE FIGHTING PROCEDURES: NOTE: Individuals should perform only those fire-fighting 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 HAZARDS: 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 pressure and explode. Alcohol vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back. Alcohols 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 must be exercised in fighting alcohol fires.	

SECTION V – REACTIVITY DATA

STABILITY:	STABLE	√	CONDITIONS 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.
	UNSTABLE		
HAZARDOUS POLYMERIZATION:	MAY OCCUR		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.
	WILL NOT OCCUR	√	

SECTION VI – HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: Inhalation, eye contact, skin contact, 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 may prove fatal.

MEDICAL CONDITIONS GENERALLY 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.

EMERGENCY AND FIRST AID PROCEDURES: 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 for at least 15 minutes while removing contaminated clothing and shoes. Do not rub or 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 – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: 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. Spilled 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.

WASTE DISPOSAL METHOD: 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.

SECTION VIII – SPECIAL PROTECTION INFORMATION

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°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 with 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 29CFR 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.

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