



M A T E R I A L S A F E T Y D A T A S H E E T

24-Hour Emergency #: (U.S.) 1-800-535-5053 / (Outside U.S.) 352-323-3500

SECTION I: Product & Company Identification

Product Name: **Ammonia Inhalant**
Catalog Number: **283010**
Distributed by: Young Dental Manufacturing
13705 Shoreline Court East
Earth City, MO 63045
1.800.325.1881

SECTION II: Health Hazard Information

Appearance: Clear, pink to light red liquid. Pungent odor of ammonia.

Primary Routes of Exposure: 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, dizziness, drowsiness, loss of appetite, 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 and throat, constriction of throat, coughing, nausea, vomiting, diarrhea.
Ingestion may 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.

NFPA Ratings: Health (3); Flammability (3); Reactivity (1)

SECTION III: Hazardous Components

Component	CAS #	%	OSHA PEL/TWA	ACGIH TLV/TWA	ACGIH TLV/STEL
Ammonia	7664-41-7	17.5	50 ppm	25 ppm	35 ppm
Ethyl Alcohol	64-17-5	37.5	1000 ppm	1000 ppm	Not listed

SECTION IV: 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.

Eye Contact: Immediately flush eyes with copious amounts of clean water for at least 15 minutes. Eyelids should be held apart and away from the eyeball for thorough rinsing. Do not permit victim to rub eyes. Get immediate medical attention.

Skin Contact: Immediately flush skin with copious amounts of clean 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 reuse.

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 V: Fire Fighting Measures

Flash Point	<50°F (10°C)
Test Method	Pensky Martens closed cup
Autoignition Temperature	Ammonia: 1204°F (651°C); Ethyl Alcohol: 685°F (363°C)
Flammable Limits in Air (% by vol.)	Lower (Unknown); Upper (Unknown)
Extinguishing Media	"Alcohol resistant" foam, CO ₂ , or dry chemical
Special Fire Fighting Procedures	(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 face-piece 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 the 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. Alcohol burns 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 VI: Accidental Release Measures

In case of spill: 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 material 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.

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

SECTION VII: Handling and Storage

Storage Requirements: Protect containers from physical damage. Detached or outside storage is ideal. 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.

SECTION VIII: Personal Protection

Personal protective equipment and special ventilation not required for single unit dose inhalant.

When handling bulk materials, use the following:

Ventilation: 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. Case must be taken to ensure 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: Gas-tight, splash-proof chemical safety goggles meeting OSHA 29CFR 1910.133 specifications

Skin Protection: Rubber gloves, protective suit, face shield, and overshoes

SECTION IX: Physical and Chemical Properties

Boiling Point	N/A for mixtures
Melting Point	Not applicable
Specific Gravity	0.891 25/25
Vapor Pressure	Unknown
Vapor Density	Unknown
Solubility in Water	Very soluble
% Volatiles by Volume	55%
Evaporation Rate (Butyl acetate = 1)	Unknown
Appearance and odor	Clear, pink to light red liquid. Pungent odor of ammonia
pH	Unknown

SECTION X: Stability and Reactivity

Stability	Stable at room temperature
Hazardous Polymerization	Will not occur
Materials to Avoid	Acids (will cause product to react exothermically), common metals, strong oxidizing agents, brass, zinc, chlorine, aluminum, copper, bronze, mercury, dimethyl sulfate, acetyl chloride
Conditions to Avoid	Sunlight, heat
Hazardous Decomposition or Byproducts	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.

SECTION XI: Toxicological Information

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 XII: Ecological Information

N/A

SECTION XIII: Disposal Considerations

Dispose of in accordance with all Federal, State and Local regulations.

SECTION XIV: Transport Information

D.O.T Shipping Name: Flammable Liquid Corrosive NOS, 3-UN2924 Packaging Group II, Subsidiary Risk 8

Domestic Shipments	Shipment Method	Overseas Shipments
CFR 173.4 Small Quantity Exception	Ground	N/A
CFR 173.4a Small Quantity Exception	Air	IATA Shipping – Flammable liquid Corrosive NOS, 3-UN2924 PGII (Ammonia, Ethanol) Subsidiary Risk (8) Excepted Quantity (Form 40-631R)

SECTION XV: Regulatory Information

N/A

SECTION XVI: Other Information

None

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Young Dental Manufacturing makes no recommendation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for particular purpose.

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