

MATERIAL SAFETY DATA SHEET

James Alexander Corporation 845 Route 94 Blairstown, NJ 07825

Product Name: Amyl Nitrite Inhalant USP

MSDS Effective Date: March 1, 2011

Page 1 of 4

CHEMTREC 24 Hour 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.

I. PRODUCT IDENTIFICATION

Manufacturer's Name: James Alexander Corporation

Phone: (908)362-9266

Address: 845 Route 94 Blairstown, NJ 07825

Product Name: Amyl Nitrite Inhalant USP

Synonyms: Isopentyl Nitrite; 3-Methylbutanol Nitrite

D.O.T. Shipping Name: Amyl Nitrite, UN1113 Hazard Class 3, Packaging Group II

NFPA Ratings (estimated): Health - 2 Flammability - 3 Instability - 2

II. HAZARDOUS INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>%</u>	<u>OSHA</u> <u>PEL/TWA</u>	<u>ACGIH</u> <u>TLV/TWA TLV/STEL</u>
Isoamyl Nitrite	110-46-3	98%	Not listed	Not listed

III. PHYSICAL DATA

Boiling Point: 99 degrees C (210 degrees F)

Melting Point: Unknown

Specific Gravity: 0.875

Vapor Pressure: Unknown

Vapor Density: Unknown

Solubility in water: Insoluble

% volatiles by vol.: 98%

Evaporation Rate: Unknown

Appearance and odor: Light yellow liquid. Fruity odor.

pH: Not determined

IV FIRE & EXPLOSION INFORMATION

Flash Point: -18 degrees C (0 degrees F) **Test Method:** Closed Cup

Boiling Point: 99 degrees C (210 degrees F) **Ignition Temperature:** 209 degrees C (408^o F)

Flammable limits in air % by volume: Lower (Unknown) Upper (Unknown)

Extinguishing media: Alcohol resistant foam, carbon dioxide or dry chemical.

Special fire fighting procedures:

Note: Individuals should perform only those fire-fighting procedures for which they have been trained.

MATERIAL SAFETY DATA SHEET

James Alexander Corporation 845 Route 94 Blairstown, NJ 07825

Product Name: Amyl Nitrite Inhalant USP

MSDS Effective Date: March 1, 2011

Page 2 of 4

CHEMTREC 24 Hour 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.

Extremely flammable liquid and vapor. 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. Liquid will float on water and may travel to a source of ignition and spread fire.

Unusual fire and explosion hazard: When heated, mixture will give off toxic vapors. Closed containers exposed to heat may develop pressure and explode.

-----V. HEALTH HAZARD INFORMATION-----

Primary routes of exposure: Inhalation, eye contact, skin contact, ingestion.

Signs and symptoms of overexposure:

Inhalation: The material is a coronary vasodilator which may cause increased heart rate, headache, and dizziness and a sharp decrease in blood pressure with resulting loss in consciousness. May cause methemoglobinemia, which is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of the skin due to deficient oxygenation of the blood), rapid heart rate, unconsciousness and death.

Eye contact: Causes eye irritation.

Skin contact: Mildly irritating to the skin. Can be absorbed through the skin and cause vasodilation with symptoms of flushing of the skin, warm feeling and headache.

Ingestion: May be harmful if swallowed. The material is a coronary vasodilator which may cause increased heart rate, headache, and dizziness and a sharp decrease in blood pressure with resulting loss in consciousness. May cause methemoglobinemia, which is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of the skin due to deficient oxygenation of the blood), rapid heart rate, unconsciousness and death.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects of overexposure.

-----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 methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobinemia concentration in the blood.

MATERIAL SAFETY DATA SHEET

James Alexander Corporation 845 Route 94 Blairstown, NJ 07825

Product Name: Amyl Nitrite Inhalant USP

MSDS Effective Date: March 1, 2011

Page 3 of 4

CHEMTREC 24 Hour 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.

For Eye Contact: Immediately flush eyes with plenty 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 plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention if irritation persists after washing. Wash clothing before re-use.

For Ingestion: Contact a Poison Control Center *immediately*. Do not induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Get *immediate* medical attention.

VII. TOXICITY DATA

This material is not currently classified as a carcinogen in the NTP Annual Report on Carcinogens, IARC Monographs, CA Prop 65, or by OSHA.

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 at refrigerated temperatures from 2-8 degrees C (36-46 degrees F). 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 a NIOSH approved respirator designed for organic vapors.

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. When handling bulk material, use impervious gloves for most effective skin protection.

IX. HAZARDOUS REACTIVITY

Stable at room temperature. Hazardous polymerization will not occur. However, nitrous acids, oxides of nitrogen, nitrites, carbon monoxide and carbon dioxide may be formed during combustion.

MATERIAL SAFETY DATA SHEET

James Alexander Corporation 845 Route 94 Blairstown, NJ 07825

Product Name: Amyl Nitrite Inhalant USP

MSDS Effective Date: March 1, 2011

Page 4 of 4

CHEMTREC 24 Hour 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.

Conditions To Avoid: Heat (heating above ambient temperatures causes the vapor pressure of the material to increase), light, moisture, ignition sources.

-----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. Spilled liquids should be contained and not washed into sewers or ground water. Contain by diking with non-combustible absorbent materials. Place residue using non-sparking tools in a 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

Date of Initial Preparation: March 1, 2011

Latest Revision Date: March 1, 2011

NOTE: This Material Safety Data Sheet is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, the safe handling of chemical materials.

James Alexander Corporation (JAC), expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose with respect to the product or information provided herein.

All information appearing herein is based upon data obtained from the manufacturer(s) and/or recognized technical sources. While the information is believed to be accurate, JAC makes no representations as to its accuracy or sufficiency. Conditions of use are beyond JAC's control and therefore, users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein and does not relate to its use in combination with any other material or in any other process.