

Material Safety Data Sheet

(10800)

Section 1: Chemical Product and Company Identification

Product Name: Amyl acetate

Catalog Number: 10800

CAS#: 628-63-7

Contact Information:

Electron Microscopy Sciences

1560 Industry Road

Hatfield, PA 19440

1-215-412-8400 (phone)

1-800-523-5874 (toll-free)

1-215-412-8450 (fax)

Order Online: emsdiasum.com

CHEMTREC (24-Hour Emergency

Telephone), call: 1-800-424-9300

Section 2: Composition and Information on Ingredients

Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
Amyl acetate	628-63-7	100			100

Toxicological Data on Ingredients:

Amyl acetate:

ORAL(LD50): Acute: >1600 mg/kg [Rat]. 7400 mg/kg [Rabbit]

VAPOR (LC): Acute: >3000 ppm 6 hours [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation

Potential Chronic Health Effects: Slightly hazardous in case of skin contact (sensitizer).

Carcinogenic Effects: Not available

Mutagenic Effects: Not available

Teratogenic Effects: Not available

Developmental Toxicity: Not available

The substance is toxic to the nervous system, liver, central nervous system (CNS).

Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. Immediately flush with running water for at least 15 minutes keeping eyelids open. Cold water may be used. WARM water MUST be used. Get medical attention.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable

Autoignition Temperature: 360°C (680°F)

Flash Points: CLOSED CUP; 16°C (60.8°F) – 25C

Flammable Limits: Lower: 1.1%, Upper: 7.5%

Products of Combustion: These products are carbon oxides (CO, CO₂)

Fire Hazards in Presence of Various Substances: Highly flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available

Slightly explosive in presence of heat.

Fire Fighting Media and Instructions: Flammable liquid, soluble or dispersed in water.

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards: Vapor may travel considerable distance to source of ignition and flash back.

Vapors may form explosive mixtures with air.

When heated to decomposition it emits acrid smoke and irritating fumes.

Special Remarks on Explosion Hazards: Vapors may form explosive mixtures with air.

Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill: Flammable liquid. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7 : Handling and Storage

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapors/spray. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage: Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Provide exhaust ventilation of other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection: Splash Goggles. Lab Coat. Vapor respirator. Use a vapor respirator when the concentration of vapor exceeds the recommended exposure limits. Be sure to use an approved/certified respirator or equivalent. Gloves (impervious).

Exposure Limits:

TWA: 100 (ppm) from OSHA (PEL) [United States]
TWA: 100 (ppm) from ACGIH (TLV) [United States]
TWA: 100 from NIOSH [United States]
TWA: 525 (mg/m³) from NIOSH [United States]
TWA: 525 (mg/m³) from OSHA (PEL) [United States]
TWA: 100 (ppm) [Canada]
TWA: 532 (mg/m³) [Canada]

Consult local authorities for acceptable exposure limits

Section 9: Physical and Chemical Properties

Physical State and appearance: Liquid

Molecular Weight: 130.19 g/mole

Odor: Banana-like

Taste: Not available

Color: Colorless

pH (1% soln/water): Not available

Boiling Point: 140°C (284°F) – 150C

Melting Point: -78.5°C (-109.3°F) – 70.8 C

Critical Temperature: Not available

Specific Gravity: 0.874 – 0.879 (Water=1)

Vapor Pressure: 0.5 kPa (@ 20°C)

Vapor Density: 4.5 (Air=1)

Volatility: Not available

Other Threshold: 0.054 – 3.9 ppm (low – detection in air)

53 ppm (irritating concentration)

300 ppm (noticeability irritating to eyes)

Water/Oil Dist. Coeff.: The product is more soluble in oil; log (oil/water) = 2.3

Ionicity (in Water): Not available

Dispersion Properties: See solubility in water, diethyl ether.

Solubility: Easily soluble in cold water.

Very slightly soluble in cold water.

Very soluble in ethanol.

Solubility in Water: 1730 mg/l @ 25 deg. C

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources (sparks, flames, static), incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Incompatible with nitrates and other strong oxidizers, alkalis and acids.

Special Remarks on Corrosivity: For Amyl Acetate (mixed isomers) RTECS no. AJ2010000:

Lethal Dose/Conc 50% Kill:

LD50[Rat] – Route: oral; Dose; 6500 ul/kg

LD50[Rabbit] – Route: skin; Dose: >20 mg/kg

Special Remarks on Chronic Effect on Humans: Not available

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects:

Skin: Causes skin irritation. It may be absorbed through the skin causing system effects similar to acute ingestion.

Eyes: Causes eye irritation. May cause conjunctivitis and minor corneal injury.

Inhalation: Inhalation of mist or vapor may cause irritation of the respiratory tract and eye irritation (conjunctivitis). The main effects at concentrations up to 200 ppm include nasal discomfort, discharge, chest pain, coughing, wheezing, dyspnea.

Inhalation of high concentrations (above 200 ppm) may also cause nausea, vomiting, and drowsiness, weakness, confusion, delirium, giddiness, ataxia, disturbed vision, unconsciousness, coma), disturbances of cardiac rhythm, and death from respiratory failure.

Ingestion: Large doses may cause colic, gout, diarrhea, listlessness, trembling, headache, weakness, fatigue, incoordinated movements, dyspnea, anorexia, loss of weight, joint and muscle pain. Molybdenum ingestion is associated with depleted copper stores in the body.

Chronic Potential Health Effects:

Ingestion and Inhalation: Prolonged or repeated ingestion or inhalation of Molybdenum/Molybdenum compounds may affect the blood and cause anemia. Anemia is a characteristic feature of Molybdenum toxicity. Prolonged or repeated ingestion of Molybdenum may also deplete copper stores in the body (liver), and cause symptoms similar to that of acute ingestion. Prolonged or repeated ingestion of Molybdenum and Molybdenum compounds may also affect the liver, kidneys, spleen and may cause abnormal bone growth.

Medical Conditions Aggravated by Exposure: People who have an inadequate intake of dietary intake of copper, or some dysfunction in their copper metabolism could be at greater risk for Molybdenum toxicity.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation.

Toxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIAMTED ON THE BASIS OF A 4-HOUR EXPOSURE.

Acute oral toxicity (LD50): >1600 mg/kg [Rat].

Acute toxicity of the vapor (LC50): >3000 6 hours [Rat].

Chronic Effects on Humans: May cause damage to the following organs: the nervous system, liver, central nervous system (CNS).

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: For Amyl Acetate (mixed isomers) RTECS no. AJ2010000:

Lethal Dose/Conc 50% Kill:

LD50[Rat] – Route: oral; Dose; 6500 ul/kg

LD50[Rabbit] – Route: skin; Dose: >20 ml/kg

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Skin: Causes severe irritation. It may be absorbed through the skin causing system effects similar to acute ingestion.

Eye: Cause eye irritation. May cause conjunctivitis and minor corneal injury.

Inhalation: Inhalation of mist or vapor may cause irritation of the respiratory tract and eye irritation (conjunctivitis). The

main effects at concentrations up to 200 ppm include nasal discomfort, discharge, chest pain, coughing, wheezing, dyspnea. Inhalation of high concentrations (above 200 ppm) may also cause nausea, vomiting, and affect behavior/central nervous system causing central nervous system effects such as headache, dizziness, drowsiness, weakness, confusion, delirium, giddiness, ataxia, disturbed vision, unconsciousness, coma), disturbances of cardiac rhythm, and death from respiratory failure.

Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, abdominal discomfort, diarrhea. Ingestion of large amounts may also affect behavior/central nervous system and cause symptoms similar to acute inhalation. Chronic Potential Health Effects:

Note: Other occasional complications due to overexposure by inhalation or ingestion may include gastrointestinal hemorrhage, kidney damage with glycosuria, cardiac failure, pulmonary edema.

Chronic Potential Health Effects:

Skin: Prolonged or repeated skin contact may cause dryness and cracking of the skin, dermatitis, an allergic skin reaction.

Inhalation and Ingestion: Prolonged or repeated exposure via ingestion or inhalation may cause liver damage. It may also cause brain or nerve damage. Effects may include reduced memory and concentration, personality changes (withdrawal, irritability), fatigue, sleep disturbances, reduced coordination, and/or effects on nerves supplying internal organs (autonomic nerves) and/or nerves to the arms and legs (weakness, "pins and needles").

Section 12: Ecological Information

Ecotoxicity: Ecotoxicity in water (LC50): 69 mg/l 96 hours [Fish (Fathead minnow)].

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Class 3: Flammable Liquid

Identification: Amyl Acetate UNNA: 1104 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations

Connecticut hazardous material survey: Amyl acetate

Illinois chemical safety act: Amyl acetate

New York release reporting list: Amyl acetate

Rhode Island RTK hazardous substances: Amyl acetate

Pennsylvania RTK: Amyl acetate

Massachusetts RTK: Amyl acetate

Massachusetts spill list: Amyl acetate

New Jersey: Amyl acetate

New Jersey spill list: Amyl acetate
Louisiana spill reporting: Amyl acetate
California Director's List of Hazardous Substances (8 CCR 339): Amyl acetate
TSCA 8(b) inventory: Amyl acetate
TSCA 8(a) PAIR: Amyl acetate
TSCA 8(d) H and S data reporting: Amyl acetate: Effective date: 1/26/94; Sunset date: 6/30/98
CERCLA: Hazardous substances: TSCA 8(b) inventory: Amyl acetate: 5000 lbs. (2268 kg)

California Proposition 65 Warnings: California Prop. 65. This product contains the following ingredients for which the State of California as found to cause cancer which would require a warning under the statute: No products were found.
California Prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 211-047-3).
Canada: Listed on Canadian Domestic Substance List (DSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AICS.

Other Classifications:

WHMIS (Canada): Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F)

DSCL (EEC): R10 – Flammable

R66 – Repeated exposure may cause skin dryness or cracking.

S23 – Do not breathe gas/fumes/vapor/spray

S25 – Avoid contact with eyes

HMIS (U.S.A.): Health Hazard: 2, Fire Hazard: 3, Reactivity: 0, Personal Protection: j

National Fire Protection Association (U.S.A.): Health: 1, Flammability: 3, Reactivity: 0

Section 16: Other Information:

Other Special Considerations: Major Uses: Solvent for lacquers and paints; extraction of penicillin; photographic film; leather polishes; nail polish; as a warning odor; flavor agent; printing and finishing fabrics; solvent for phosphors in fluorescent lamps; pre spotting and spotting in dry cleaning industry; manufacture of artificial fruit flavoring agents; vehicle for stiffening agent in manufacture of straw hats; to remove oil base stains and soluble plastics in dry cleaning; partition solvent; repellent in soil treatment; insecticide and miticide to combat wasps, hornets, and yellow jackets.

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