



MATERIAL SAFETY DATA SHEET

Elmer Art

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Elmer's Products, Inc.
1 Easton Oval
Columbus, OH 43219

Emergency Phone Number:
Poison Control Center
1-888-516-2502

For additional product information, access our website at www.elmers.com or call 1-888-435-6377. To place an order, call 1-800-848-9400.

SUBSTANCE: ELMER'S MOUNTING SPRAY ADHESIVE

TRADE NAMES/SYNONYMS:
E405; E454

PRODUCT USE: adhesives

PREPARATION DATE: May 01 2002
REVISION DATE: Jan 15 2008

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: 2-METHYLPENTANE
CAS NUMBER: 107-83-5
PERCENTAGE: 15-40

COMPONENT: ACETONE
CAS NUMBER: 67-64-1
PERCENTAGE: 10-30

COMPONENT: DIMETHYL ETHER
CAS NUMBER: 115-10-6
PERCENTAGE: 10-30

COMPONENT: ISOBUTANE
CAS NUMBER: 75-28-5
PERCENTAGE: 5-10

COMPONENT: PENTANE
CAS NUMBER: 109-66-0
PERCENTAGE: 1-5

SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=4 REACTIVITY=0



EMERGENCY OVERVIEW:

COLOR: white

PHYSICAL FORM: liquid

ODOR: minty odor

MAJOR HEALTH HAZARDS: respiratory tract irritation, skin irritation, eye irritation, central nervous system depression

PHYSICAL HAZARDS: Flash back hazard. Containers may rupture or explode if exposed to heat.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation, changes in body temperature, nausea, vomiting, stomach pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, loss of coordination, blurred vision, kidney damage, liver damage, convulsions, unconsciousness, coma

LONG TERM EXPOSURE: irritation, changes in body temperature, headache, drowsiness, dizziness, blood disorders

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: irritation, tingling sensation

EYE CONTACT:

SHORT TERM EXPOSURE: irritation (possibly severe), blurred vision, tearing

LONG TERM EXPOSURE: irritation

INGESTION:

SHORT TERM EXPOSURE: ingestion of harmful amounts is unlikely

LONG TERM EXPOSURE: ingestion of harmful amounts is unlikely

SECTION 4 FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

INGESTION: If a large amount is swallowed, get medical attention.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Severe fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Containers may rupture or explode if exposed to heat.

EXTINGUISHING MEDIA: carbon dioxide, regular dry chemical

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Avoid inhalation of material or combustion by-products. Stay upwind and

keep out of low areas.

FLASH POINT: -155 F (-104 C) (PMCC)

LOWER FLAMMABLE LIMIT: 1.0%

UPPER FLAMMABLE LIMIT: 18.0%

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Stop leak if possible without personal risk. Small spills of the liquid component: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Spills with a large number of canisters: Reduce vapors with water spray. Remove sources of ignition. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

SECTION 7 HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Store below 49 C. Keep away from heat, sparks and flame. Avoid direct sunlight. See original container for storage recommendations. Keep separated from incompatible substances.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

2-METHYLPENTANE:

No occupational exposure limits established.

ACETONE:

1000 ppm (2400 mg/m³) OSHA TWA

750 ppm (1780 mg/m³) OSHA TWA (vacated by 58 FR 35338, June 30, 1993)

1000 ppm (2375 mg/m³) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)

500 ppm ACGIH TWA

750 ppm ACGIH STEL

250 ppm (590 mg/m³) NIOSH recommended TWA 10 hour(s)

DIMETHYL ETHER:

1000 ppm AIHA recommended TWA

ISOBUTANE:

800 ppm (1900 mg/m³) NIOSH recommended TWA 10 hour(s)

LIQUIFIED PETROLEUM GAS (LPG):

1000 ppm (1800 mg/m³) OSHA TWA

1000 ppm ACGIH TWA

1000 ppm (1800 mg/m³) NIOSH recommended TWA 10 hour(s)

PENTANE:

1000 ppm (2950 mg/m³) OSHA TWA

600 ppm (1770 mg/m³) OSHA TWA (vacated by 58 FR 35338, June 30, 1993)

750 ppm (2210 mg/m³) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)
600 ppm ACGIH TWA
120 ppm (350 mg/m³) NIOSH recommended TWA 10 hour(s)
610 ppm (1800 mg/m³) NIOSH recommended ceiling 15 minute(s)

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.
For Unknown Concentrations or Immediately Dangerous to Life or Health -
Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.
Any self-contained breathing apparatus with a full facepiece.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: aerosol

COLOR: white

PHYSICAL FORM: liquid

ODOR: minty odor

BOILING POINT: -44 to 150 F (-42 to 65.6 C)

FREEZING POINT: Not available

VAPOR PRESSURE: Not available

VAPOR DENSITY (air=1): >1

SPECIFIC GRAVITY (water=1): 0.7493

WATER SOLUBILITY: almost insoluble

PH: Not applicable

VOLATILITY: Not applicable

ODOR THRESHOLD: Not available

EVAPORATION RATE: faster than butyl acetate

VOC: 64.7%

VOC LESS WATER AND EXEMPT SOLVENTS: 529 g/L

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not applicable

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.

INCOMPATIBILITIES: acids, amines, bases, oxidizing materials, reducing agents

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: oxides of carbon, oxides of sulfur, hydrocarbons

POLYMERIZATION: Will not polymerize.

SECTION 11 TOXICOLOGICAL INFORMATION

2-METHYLPENTANE:

LOCAL EFFECTS:

Irritant: inhalation, skin, eye

TARGET ORGANS: central nervous system

ADDITIONAL DATA: Stimulants such as epinephrine may induce ventricular fibrillation.

ACETONE:

IRRITATION DATA:

500 ppm eyes-human; 395 mg open skin-rabbit mild; 500 mg/24 hour(s) skin-rabbit mild; 20 mg eyes-rabbit severe; 20 mg/24 hour(s) eyes-rabbit moderate

TOXICITY DATA:

50100 mg/m³/8 hour(s) inhalation-rat LC50; >9400 ul/kg skin-guinea pig LD50; 5800 mg/kg oral-rat LD50

CARCINOGEN STATUS: ACGIH: A4 -Not Classifiable as a Human Carcinogen

LOCAL EFFECTS:

Irritant: inhalation, skin, eye

ACUTE TOXICITY LEVEL:

Slightly Toxic: inhalation, ingestion

TARGET ORGANS: central nervous system

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: respiratory disorders, skin disorders and allergies

MUTAGENIC DATA: Available.

REPRODUCTIVE EFFECTS DATA: Available.

ADDITIONAL DATA: Alcohol may enhance the toxic effects.

DIMETHYL ETHER:

TOXICITY DATA:

308 gm/m³ inhalation-rat LC50

LOCAL EFFECTS:

Irritant: inhalation, skin, eye

ACUTE TOXICITY LEVEL:

Slightly Toxic: inhalation

TARGET ORGANS: central nervous system

REPRODUCTIVE EFFECTS DATA: Available.

ISOBUTANE:

TOXICITY DATA:

57 pph/15 minute(s) inhalation-rat LC50

LOCAL EFFECTS:

Irritant: inhalation

ACUTE TOXICITY LEVEL:

Relatively Non-toxic: inhalation

TARGET ORGANS: central nervous system

ADDITIONAL DATA: Stimulants such as epinephrine may induce ventricular fibrillation.

PENTANE:

TOXICITY DATA:

364 gm/m³/4 hour(s) inhalation-rat LC50

LOCAL EFFECTS:

Irritant: inhalation, skin

ACUTE TOXICITY LEVEL:

Relatively Non-toxic: inhalation

TARGET ORGANS: central nervous system**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** respiratory disorders, skin disorders and allergies**ADDITIONAL DATA:** Alcohol may enhance the toxic effects.

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:**PROPER SHIPPING NAME:** Consumer commodity**HAZARD CLASS OR DIVISION:** ORM-D**CANADIAN TRANSPORTATION OF DANGEROUS GOODS:** No classification assigned.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:**CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):****ACETONE:** 5000 LBS RQ**SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):** Not regulated.**SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40):** Not regulated.**SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):**

ACUTE: Yes

CHRONIC: No

FIRE: Yes

REACTIVE: No

SUDDEN RELEASE: Yes

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.**OSHA PROCESS SAFETY (29CFR1910.119):** Not regulated.**STATE REGULATIONS:**<http://www.elmers.com/msds/me405.htm>

California Proposition 65: Not regulated.

CANADIAN REGULATIONS:

ENVIRONMENTAL CLASSIFICATION: Not determined.

NATIONAL INVENTORY STATUS:

U.S. INVENTORY (TSCA): Listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION:

ACETONE

CAS NUMBER: 67-64-1

SECTION 4

CANADA INVENTORY (DSL/NDSL): Not determined.

SECTION 16 OTHER INFORMATION

MSDS SUMMARY OF CHANGES

SECTION 11 TOXICOLOGICAL INFORMATION

SECTION 15 REGULATORY INFORMATION

©Copyright 1984-2002 MDL Information Systems, Inc. All rights reserved.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product will conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

