MATERIAL SAFETY DATA SHEET

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

CREATION 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 SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):
ACUTE: Yes
CHRONIC: No
FIRE: Yes
REACTIVE: No
SUDDEN RELEASE: Yes


STATE REGULATIONS:
California Proposition 65: Not regulated.

CANADIAN REGULATIONS:
WHMIS 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

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