

Material Safety Data Sheet

1. Chemical Product and Company Identification

DESCRIPTION:
PRODUCT TYPE:
APPLICATION:

ELMER'S SPRAY ADHESIVE RUBBER BASED ADHESIVE E-451, E-452 (AEROSOLS)

Manufacturer/Supplier Information

MSDS Prepared by:
Elmer's Products, Inc.
Emergency Phone Number
1000 Kingsmill Parkway
Columbus, OH 43229
For additional health, safety or regulatory information, call 614-225-7689.
Call 1-800-848-9400 to place an order or request additional MSDSs.

2. Composition, Information on Ingredients

The ingredients listed below have been associated with one or more immediate and/or delayed(*) health hazards. Risk of damage and effects depends upon duration and level of exposure. BEFORE USING, HANDLING, OR EXPOSURE TO THESE INGREDIENTS, READ AND UNDERSTAND THE MSDS.

 8 by weight

 67-64-1 *Acetone
 10-30

 115-10-6 Dimethyl Ether
 50-70

 142-82-5 Heptane
 10-30

3. Hazards Identification

3.1 Emergency Overview

Appearance White to off white in color Odor Mild to slight ethereal odor DANGER!

EXTREMELY FLAMMABLE May be harmful if inhaled. Can cause central nervous system depression. Skin irritant.
Eye irritant.

HMIS Rating

```
HEALTH = 2 \pmod{erate}
FLAMMABILITY = 4 (severe)
  REACTIVITY = 0 (minimal)
     CHRONIC = *
```

3.2 Potential Health Effects

Immediate Hazards

INGESTION: Not expected to be harmful under normal conditions of

If accidently swallowed, burns or irritation to mucous

membranes, esophagus or GI tract can result.

INHALATION: May be harmful if inhaled. Liquid or vapor may cause

irritation of nose, throat and lungs. Can cause central nervous system depression.

SKIN: Causes irritation. EYES: Causes irritation.

67-64-1

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and

even asphyxiation.

Dimethyl Ether 115-10-6

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and

even asphyxiation. 142-82-5

Heptane

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and even asphyxiation.

Delayed Hazards

Acetone 67-64-1

Ingestion may cause liver damage. Ingestion may cause kidney damage.

-- See Footnote C.

Footnote C: As of the date of issuance of this document, this material has not been listed by NTP, classified by IARC nor regulated by OSHA as a carcinogen.

4. First Aid Measures

EYES:

If accidently swallowed, dilute by drinking large INGESTION:

quantities of water. Immediately contact poison control

center or hospital emergency room for any other

additional treatment directions.

INHALATION: If inhaled, remove to fresh air. If not breathing,

give artificial respiration, preferably mouth-to-mouth.

Call a physician.

SKIN: Flush with plenty of water. Remove contaminated

clothing. Call a physician if irritation persists. Immediately flush eyes with plenty of water for at

least 15 minutes. Eyelids should be held apart during irrigation to insure water contact with entire surface of

eyes and lids. Call a physician.

5. Fire Fighting Measures

Autoignition Temperature Not available Upper/Lower Flammable Limits Not available Up/Lower Explosive Limits, % by Vol 18/3.4-42 deg F (TOC) Flash Point EXTREMELY FLAMMABLE. DO NOT INCINERATE (BURN) CONTAINER. AVOID HEAT. KEEP CONTAINER BELOW 120 F (50 C). High temperatures may cause bursting. Do not place container on radiator, stove, in direct sunlight or near other heat sources. DO NOT PUNCTURE CONTAINER. Contents under pressure will discharge. AVOID OPEN FLAMES, SPARKS, PILOT LIGHTS. DO NOT SMOKE. Vapor may ignite explosively. Spray mist or vapor evaporating from a deposited film is heavier than air and may settle in low places or travel outward to a source of ignition and flashback. In case of fire, use dry chemical, foam or CO2. Water may be ineffective, but should be used to keep fire-exposed containers cool.

6. Accidental Release Measures

Eliminate all ignition sources. Soak up with absorbent material and remove to a chemical disposal area. Prevent entry into natural bodies of water.

7. Handling and Storage

7.1 Handling

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing. Wash thoroughly after handling.

INHALATION: USE WITH ADEQUATE VENTILATION. To avoid breathing vapors or spray mist, open windows and doors or use other means, such as an exhaust fan to ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness, increase fresh air, wear respiratory protection (NIOSH/MSHA TC23C or equivalent), or leave the area.

SKIN: Avoid contact with skin and clothing.

EYES: Avoid contact with eyes.

7.2 Storage

Store in a cool, dry place.
Empty container may contain product residues. DO NOT cut, torch or reuse without commercial cleaning.
Keep containers tightly closed.
Do not store at temperatures above 50 C.
Keep away from heat, sparks, flame and other ignition sources.
Do not store near strong oxidizing chemicals.

8. Exposure Controls/Personal Protection

8.1 Exposure Controls

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate. If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal Protection

Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

8.3 Exposure Guidelines

Acetone 67-64-1 ACGIH TLV: 500 ppm (1188 mg/m³) TWA; 750 ppm (1782 mg/m³) STEL OSHA PEL: 1000 ppm (2400 mg/m^3) TWA REMANDED PEL: 750 ppm (1800 mg/m 3) TWA; 1000 ppm (2400 mg/m 3) STEL OSHA 1989 PEL remanded, but in effect in some states Dimethyl Ether 115-10-6 ACGIH TLV: NONE ESTABLISHED OSHA PEL: NONE ESTABLISHED 142-82-5 Heptane ACGIH TLV: 400 ppm (1640 mg/m³) TWA; 500 ppm (2050 mg/m³)STEL OSHA PEL: 500 ppm (2000 mg/m³) TWA REMANDED PEL: 400 ppm (1600 mg/m³) TWA; 500 ppm (2000 mg/m³)STEL OSHA 1989 PEL remanded, but in effect in some states

9. Physical and Chemical Properties

Percent Volatiles pH @ 25 C Not available Specific Gravity 0.72 Appearance White to off white in color Autoignition Temperature Not available Boiling Point 66 deg C Vapor Density (Air=1) > 1 Vapor Pressure, mm Hg @ 20 C > 1 Evaporation Rate (Butyl Acetate=1) < 1---(ethyl ether=1) Upper/Lower Flammable Limits Not available Up/Lower Explosive Limits, % by Vol 18/3.4 Flash Point -42 deg F (TOC) Freezing Point Not available Odor Mild to slight ethereal odor Odor Threshold, ppm Not available Solubility in Water Negligible Coefficient of Water/Oil Distrib. Not applicable

10.	Sta	bility	and	Rea	ctivity
-----	-----	--------	-----	-----	---------

Normally stable as defined in NFPA 704-12(4-3.1).

• Incompatibilities:

Strong oxidizers.

• Decomposition products may include:

Oxides of carbon.

• Hazardous polymerization:

Will not occur.

Other Hazards:

None known to Borden.

11. Toxicological Information

```
See Section 3 Hazards Identification information.
Acetone 67-64-1
LC50: Not available
LD50: oral-rat=5800 mg/kg (RTECS); skin-rabbit=20 gm/kg (RTECS)
Dimethyl Ether 115-10-6
LC50: Not available
LD50: Not available
Heptane 142-82-5
LC50: Not available
LD50: Not available
LD50: Not available
```

12. Ecological Information

Not determined.

13. Disposal Considerations

Dispose of according to local, state/provincial, and federal

requirements.														
Empty	CO	nta	ine	er:	May	contain	explo	sive	vapors.	DO	NOT	cut,	punct	ure
or wel	Ld	on	or	nea	rby.	Incine	ration	will	cause	conta	ainer	to	burst	
violer	ntl	v.												

14. Transport Information

14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

ORM-D Consumer Commodity.

14.2 Canadian Transportation of Dangerous Goods (TDG)

Not determined.

15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations

OSHA Hazard Communication Standard 29CFR1910.1200

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

SARA Title III: Section 311/312

Fire hazard
Sudden release of pressure (explosion) hazard
Immediate health hazard
Delayed health hazard

• SARA Title III Section 313 and 40 CFR Part 372

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier

Notification Requirement of 40 CFR Part 372. None required per SARA TITLE III SECTION 313.

TSCA Section 8(b) Inventory

All reportable chemical substances are listed on the TSCA Inventory. We rely on certifications of compliance from our suppliers for chemical substances not manufactured by Borden.

15.2 Canadian Regulations

Workplace Hazardous Materials Information System (WHMIS)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

CLASS D, DIV 2B

CLASS B, DIV 2

Canadian Environmental Protection Act (CEPA)

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

National Pollutant Release Inventory (NPRI)

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory.

Acetone 67-64-1 15.00%

16. Other Information

HL (Cautions Required): Products bearing the HL Health Label (Cautions Required) Seal of The Art & Creative Materials Institute, Inc. (ACMI) are certified to be properly labeled in a program of toxicological evaluation by a medical expert. This program is reviewed by ACMI's Toxicological Advisory Board. These products are certified by ACMI to be labeled in accordance with the chronic hazard labeling standard, ASTM D-4236 and Federal Law, P.L. 100-695.

User's Responsibility

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace

Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Educate and train your workers regarding OSHA and WHMIS precautions. Instruct your workers to handle this product properly. Consult with appropriate experts to guard against hazards associated with use of this product and its ingredients.

Disclaimer

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product shall 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.

CUR ISSUE 10-MAR-98 PREVIOUS ISSUE: 07-FEB-97