

MATERIAL SAFETY DATA SHEET

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1: GENERAL INFORMATION

DATE: 5/14/2013
 SUPERCEDES: 3/31/2008
 MON-ECO CODE: **22-18**
 TRADE NAME & SYNONYMS: **Eco-Canister System Adhesive**
 PROPER DOT SHIPPING NAME: UN3161, Liquefied Gas, Flammable, N.O.S. (Dimethyl Ether, Methylene Chloride) 2.1
 DOT HAZARD CLASSIFICATION: UN 3161
 FOR EMERGENCY CONTACT CHEM-TEL, INC. 1-800-255-3924

2: INGREDIENTS

INGREDIENT	C.A.S. No.	% by Wt.
Dimethyl Ether	115-10-6	20-30%
Methylene Chloride	75-09-2	40-50%
Isobutane	75-28-5	5-10%
Propane	74-98-6	5-10%

3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Contact with aluminum or zinc in a pressurized system may generate hydrogen gas which could create an explosion hazard.

Contains a chemical or chemicals which can cause cancer. May cause target organ effects

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Intentional concentration and inhalation may be harmful or fatal.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

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22-18 MSDS**3: HAZARDS IDENTIFICATION(cont.)****Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/Symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness and unconsciousness.

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen(BUN), blood in urine, and painful urination.

Carcinogenicity:

Contains a chemical or chemical which can cause cancer.

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Class Description</u>	<u>Regulation</u>
Methylene Chloride	75-09-2	Group 2B	International Agency for Research on Cancer
Methylene Chloride	75-09-2	Anticipated Human carcinogen	National Toxicology Program Carcinogens
Methylene Chloride	75-09-2	Cancer hazard	OSHA Carcinogens

4: FIRST AID MEASURES**4.1 FIRST AID PROCEDURES**

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed:

Eye Contact: Flush eyes with large amounts of water. If signs /symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs /symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

5: FIRE FIGHTING MEASURES**5.1 FLAMMABLE PROPERTIES**

Flammability:	Flammable per industry standard flame projection test
Auto ignition temp.	Not Established
Flash Point	-156 degrees F (-104 degrees C)
Flammable Limits-LEL	1.8
Flammable Limits-UEL	18

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide)

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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5: FIRE FIGHTING MEASURE S(cont.)

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition.

6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors in accordance with good industrial hygiene practice. Warning! A motor can be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity, or flammability hazard. Collect as much of the spilled material as possible using non sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected matter as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

7: HANDLING AND STORAGE

7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. No smoking while handling this material. Avoid breathing of vapors, mist or spray. Avoid eye contact with vapors, mists, or spray. Keep out of reach of children. Vapors may ignite explosively. May cause flash fire. Prevent build-up of vapors-open all windows and doors. Maintain vapor concentrations below recommended exposure limits. Use only with cross-ventilation. Without adequate ventilation, vapors may settle in low-lying areas. Keep away from heat, sparks, and open flames. Do not smoke or ignite matches, lighters, etc. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure limits. If ventilation is not adequate, use respiratory protection equipment.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container tightly closed. Store away from oxidizing agents.

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. Use in an enclosed process area is recommended. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use protection equipment.

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8: EXPOSURE CONTROLS/PERSONAL PROTECTION(cont.)

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)**8.2.1 Eye/Face protection**

Avoid eye contact with vapors, mist or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields, Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA), Polyethylene/Ethylene Vinyl Alcohol.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists, or spray.

Conduct air monitoring to determine adequacy of ventilation and need for respiratory protective equipment. If ventilation is inadequate select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface pressure demand self-contained breathing apparatus. Consult your personal protection supplier for further information

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 Exposure Guidelines

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
Dimethyl Ether	AIHA	TWA	1000 ppm	
Dimethyl Ether	CMRG	TWA	1000 ppm	
Isobutane	ACGIH	TWA	1000 ppm	
Methylene Chloride	ACGIH	TWA	50 ppm	Table A3
Methylene Chloride	OSHA	TWA	25 ppm	
Methylene Chloride	OSHA	STEL	125 ppm	
Propane	ACGIH	TWA	1000 ppm	
Propane	OSHA	TWA	1000 ppm	Table Z-1

SOURCES OF EXPOSURE LIMIT DATA:

ACGIH:	American Conference Of Governmental Industrial Hygienists
AIHA:	American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)
CMRG:	Chemical Manufacturer Recommended Guideline
EPA:	Environmental Protection Agency
IARC:	International Agency for the Research on Cancer
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration

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9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color	Strong solvent odor, clear
Boiling point	-44 degrees F (-42degrees C)
Vapor Pressure	Not Established
Vapor Density	Not Established
Specific Gravity	.86 to 90 gms/liter (7.1 to 7.5 lbs/gal)
Solubility in Water	Negligible
Volatile Organic Compounds	35% weight

10: STABILITY AND REACTIVITY

Stability: Stable

Materials and Conditions to Avoid: Sparks and/or flames

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Formaldehyde	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

11: TOXICOLOGICAL INFORMATION

Carcinogenicity: No data available

12: ECOLOGICAL INFORMATION

Not Determined

13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA); D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

14: TRANSPORTATION INFORMATION

UN3161, Liquefied Gas, Flammable, N.O.S. (Dimethyl Ether, Methlene Chloride), 2.1

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15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

311/312 Hazard Categories:

Fire Hazard – Yes Pressure Hazard – Yes Reactivity Hazard – No Immediate Hazard – Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40CFR part 372 (EPCRA):

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. Number</u>	<u>% by Wt.</u>
Methylene Chloride	75-09-2	40-50%

STATE REGULATIONS

CALIFORNIA PROPOSITION 65

<u>Ingredient(Category if applicable)</u>	<u>C.A.S. Number</u>	<u>Classification</u>
Methylene Chloride	75-09-2	**Carcinogen

**WARNING: contains a chemical which can cause cancer

16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 0 Special Hazard: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion, or decomposition products that are known to be generated in significant quantities.

No revision information is available.

DISCLAIMER: This information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued.

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