

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Eco-Hanger Grip Adhesive
PRODUCT NUMBER: 22-15



MON-ECO INDUSTRIES, INCORPORATED

TRADE NAME: Eco-Hanger Grip Adhesive GENERAL USE: Adhesive Product CHEMICAL FAMILY: Solvent Based Adhesive MANUFACTURER Mon-Eco Industries, Inc. TELEPHONE NUMBER (General Inquiries) 732-257-7942 ADDRESS (NUMBER, STREET, P.O. BOX) 5 Joanna Ct (CITY, STATE AND ZIP CODE) COUNTRY East Brunswick, NJ 08816 USA	PRODUCT DESCRIPTION: Soft gray paste, mild odor. EFFECTIVE DATE: 01 February 2011 DATE OF EXPIRATION: 31 January 2014 SUPERSEDES DATE: 03 April 2008 CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBERS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">ChemTel INC. </td> <td style="width: 33%; text-align: center;">1-800-255-3924 North America (Toll Free)</td> <td style="width: 33%; text-align: center;">813-248-0585 International and Local Calls</td> </tr> </table>	ChemTel INC.	1-800-255-3924 North America (Toll Free)	813-248-0585 International and Local Calls
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SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER! EXTREMELY FLAMMABLE!! Breathing vapors may cause drowsiness, dizziness and nausea; intentional misuse or abuse of product may be fatal. May cause respiratory tract, skin, and eye irritation. Harmful if aspirated. May cause liver, spleen and kidney damage. May cause central nervous system effects. Possible risks of irreversible effects from acute and chronic exposures. Target Organs: Liver, central nervous system, kidneys, bladder, reproductive system. **WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.**

US / CANADA HAZARD SYMBOL(S) 	EUROPEAN (GHS) HAZARD SYMBOLS DANGER
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HMIS HAZARD RATINGS

0 = INSIGNIFICANT, 1 = SLIGHT, 2 = MODERATE
 3 = HIGH, 4 = EXTREME
 * - CHRONIC HEALTH HAZARD

HEALTH:	2
FLAMMABILITY:	4
PHYSICAL HAZARD:	1

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:

HMIS PERSONAL PROTECTIVE EQUIPMENT LETTER:

H



Splash goggles, gloves, apron and a vapor respirator

RISK PHRASES

- R12 Highly flammable.
- R38 Irritating to skin.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R62 Possible risk of impaired fertility.
- R63 Possible risk of harm to the unborn child.
- R65 Harmful: may cause lung damage if swallowed.
- R67 Vapours may cause drowsiness and dizziness.

SAFETY PHRASES

- S2 Keep out of the reach of children.
- S9 Keep container in a well-ventilated place.
- S16 Keep away from sources of ignition — No smoking.
- S36/37 Wear suitable protective clothing and gloves.
- S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.
- S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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PRODUCT NAME: Eco-Hanger Grip Adhesive
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SECTION 2 - HAZARDS IDENTIFICATION (Continued)

POTENTIAL HEALTH EFFECTS

ACUTE EXPOSURE EFFECTS

INHALATION:

Respiratory tract irritation may occur from vapors. May cause liver, kidney, and bladder damage. Harmful if inhaled. May cause central nervous system effects. Symptoms of exposure include fatigue, irritability, headache, dizziness and/or drowsiness, gastric disturbances, and intolerance to alcohol. Aspiration of product or vomitus from ingestion and subsequent regurgitation may result in pulmonary edema and/or aspirant pneumonia.

SKIN:

May cause moderate skin irritation. Causes redness and pain. May be harmful if absorbed through the skin.

EYES:

May cause moderate to severe mechanical and chemical irritation to eyes with redness and pain; chemical conjunctivitis may occur.

INGESTION:

Causes gastrointestinal distress if ingested. May cause liver, bladder and kidney damage; nervous system effects may be seen. Aspiration of vomitus from ingestion and subsequent regurgitation may result in pulmonary edema and/or aspirant pneumonia. Other symptoms are similar to inhalation exposures; see Section 2: Inhalation Exposure.

CHRONIC EXPOSURE EFFECTS

Prolonged or repeated skin contact may result in defatting of skin, and dermatitis. Multiple or prolonged exposures may cause liver, kidney, and bladder damage. Nervous system effects including peripheral neuropathy may be seen with multiple/prolonged exposures. Adverse reproductive effects have been reported in animals for components of this product; these adverse effects include possible damage to the fetus and to the reproductive system. A possible risk of irreversible effects exists for this product; this risk is greatly increase with prolonged and/or multiple exposures or with intentional misuse/abuse of product. Proper utilization of Personal Protective Equipment (see above and Section 8) is essential to mitigate risks associated with product.

CARCINOGENICITY:

Toluene and hexane are not listed as carcinogenic by the IARC (as Groups 1, 2A, or 2B), the NTP, ESIS, OSHA, or the state of California.

SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 2)
Hexane	20-30	110-54-3	203-777-6	F, Xn	R11, 38, 48/20, 62, 65, 67
Toluene(a)	10-20	108-88-3	203-625-9	F, Xn	R11, 38, 48/20, 63, 65, 67

NOTES: This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Directive 1997/2006/EC (REACH). Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) or the European (GHS) directive 91/155/EEC and are considered trade secrets under US Federal Law (29CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directive 67/548/EEC. **(a) - WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.**

SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get emergency medical aid for cases of breathing difficulty or cessation, or where victim is not conscious and alert to surroundings. Do NOT use mouth-to-mouth resuscitation.

EYES:

Remove contact lenses if present. Immediately flush eyes with plenty of potable water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get prompt medical assistance.

SKIN:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse; severely contaminated clothing may need to be discarded.

INGESTION:

DO NOT INDUCE VOMITING!!! If victim is conscious and alert to surroundings, rinse mouth thoroughly and drink 1-2 glasses of water. Seek emergency medical attention immediately. If vomiting spontaneously occurs, place victims head below chest level to minimize aspiration risk.

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SECTION 5 - FIRE FIGHTING MEASURES

DATA RELATED TO FIRE:

FLASH POINT: <0°F / < -18°C TCC **AUTO-IGNITION TEMPERATURE:** 234°C / 453°F *

FLAMMABLE/EXPLOSIVE LIMITS: **LOWER:** 1.2% **UPPER:** 6.9%

SENSITIVITY TO MECHANICAL IMPACT/ STATIC DISCHARGE: NONE *-REFERENCES TOLUENE

GENERAL HAZARDS:

WARNING! EXTREMELY FLAMMABLE!! Product will readily burn under fire conditions with the emission of toxic and/or irritating gases and fumes. Solvent portion of product may float on water and remain ignited.

SUITABLE EXTINGUISHING MEDIA:

Water fog, Foam, CO2, Dry Chemical - Water fog or spray may be used to cool fire-exposed containers.

UNSUITABLE EXTINGUISHING MEDIA:

Water Stream - solvent portion of product may separate and float on top of water, remaining ignited and spreading fire.

FIRE FIGHTING PROCEDURES:

Firefighters must wear a self contained breathing apparatus and full chemical firefighting gear when fighting fires involving this product. Water fog or spray may be used to cool off fire-exposed containers to prevent rupture - **DO NOT USE WATER STREAMS!**

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Irritating and toxic gases and/or fumes may be generated from heated and/or ignited product; wear full chemical firefighting gear.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon monoxide, carbon dioxide, small amounts of metal oxides, nitrogen oxides, and sulfur oxides.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

REMOVE ALL IGNITION SOURCES!!! Evacuate all non-essential personnel and cordon off affected area. Cleanup personnel should wear Personal Protective Equipment. Wipe or shovel up spill; place material in container designed for flammable waste. For large spills, contact authorities; water spray may be judiciously used to reduce ignition hazard. Dispose of used absorbent in a licensed and permitted facility, preferably by incineration with exhaust scrubbers being used. Avoid contamination of waterways, sewers etc with this product.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Handle product while wearing Personal Protective Equipment and provide adequate ventilation to avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Store only in original container. avoid ignition sources and excess temperatures. Store in a cool dark place with adequate ventilation; protect product from light. Avoid moisture buildup around containers. Keep out of reach of children. Store in a tightly closed container away from incompatible materials. Do Not Freeze!

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	CAS #	ACGIH Exposure Limits (mg/m ³ unless otherwise noted)	OSHA Exposure Limits (mg/m ³ unless otherwise noted)
Hexane	110-54-3	50 ppm 167 mg/m ³ TWA	500 ppm / 1800 mg/m ³ TWA 20 ppm / 72 mg/m ³ OEL (Europe)
Toluene	108-88-3	50 ppm TWA (skin)	200 ppm TWA, 300 ppm Ceiling, 500 ppm 10 min peak 50 ppm / 192 mg/m ³ OEL / 100 ppm / 384 mg/m ³ STEL (skin)(Europe)

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PRODUCT NAME:	Eco-Hanger Grip Adhesive
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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

PERSONAL PROTECTION

RESPIRATORY PROTECTION:
 Use approved respirator (e.g. CEN, NIOSH/OSHA, AS) as required to prevent over exposure. Use an air-supplied respirator where high concentrations are expected, or an air-purifying respirator for organic vapors (with combined particulate filter if particulate matter is present). If ventilation is insufficient, supplied-air masks may be necessary.

PROTECTIVE GLOVES:
 Wear gloves made of chemically resistant material. Viton or polyvinyl alcohol are suggested materials; **DO NOT USE LATEX.**

EYE PROTECTION:
 Wear safety glasses with splash protective side shields or goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
 Wear protective clothing such as apron to prevent skin contact. See Protective Gloves section for suggested materials.

ENGINEERING CONTROLS:
 Provide general ventilation sufficient to control airborne concentration below the TLV/TWA's listed. Forced-air ventilation such as fans may be required.

WORK / HYGIENIC PRACTICES:
 Wash hands before eating, drinking, smoking and using the toilet. Launder contaminated clothing before re-use. Dispose of contaminated leather footwear. Treat unwashed contaminated clothing as flammable.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Soft gray paste, mild odor.	VAPOR PRESSURE 180 mm Hg
ODOR THRESHOLD Not Established	SPECIFIC GRAVITY (WATER = 1) 1.02
FREEZING / MELTING POINT Not Established	BOILING POINT 150°F / 65°C
SOLUBILITY IN WATER Not soluble	COEFFICIENT OF WATER / OIL DISTRIBUTION Favors Oil
pH Not Determined	SOLUBILITY IN ORGANIC SOLVENTS Variable Solubility dependent upon solvent
FLASH POINT < 0°F / < -18°C	VISCOSITY Not Determined
FLAMMABLE LIMITS LEL: 1.2% UEL: 6.9%	VAPOR DENSITY (AIR = 1) 3
AUTOIGNITION TEMPERATURE 234°C / 453°F (References Toluene)	EVAPORATION RATE (BuAc = 1) 3.2
VOLATILE ORGANIC COMPOUND (VOC) INFORMATION 3.46 lbs/ gallon or 415 g / L	
NOTES: None	

SECTION 10 - STABILITY AND REACTIVITY

STABILITY Stable under normal conditions	CONDITIONS TO AVOID: Excess heat, ignition sources, water, moisture, light, incompatible materials.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong reducing agents	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon monoxide, carbon dioxide, small amounts of metal oxides, nitrogen oxides, and sulfur oxides under fire conditions.	
HAZARDOUS POLYMERIZATION: Will not occur	CONDITIONS TO AVOID: None related to hazardous polymerization

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SECTION 11 - TOXICOLOGICAL INFORMATION

Complete Product

Oral LD₅₀	Not known - product is harmful by ingestion.
Dermal LD₅₀	Not known - product expected to be moderately irritating by contact with skin.
Inhalation LC₅₀	Not known - product components are harmful by inhalation.
Irritation / Sensitization	Chemical and mechanical irritant to eyes, skin and respiratory tract.
Carcinogenicity	Product contains no components listed by, IARC, NTP, OSHA, ESIS, or the state of California.
Mutagenicity	Not known.
Reproductive Toxicity	Known reproductive toxicants (toluene and hexane).
Teratogenicity	May possess teratogenic effects.

Product Components

Component	CAS #	LD50 of Ingredient (Oral, Rat - unless otherwise specified)	LC50 of Ingredient (Inhalation, Rat - unless otherwise specified)
Hexane	110-54-3	25 g/kg	48000 ppm / 4 Hours
Toluene	108-88-3	636 mg/kg	49 g/m ³ / 4 Hours


SECTION 12 - ECOLOGICAL INFORMATION

Product should be considered as harmful to aquatic environments; do not discard into bodies of water. Solid components of product may bioaccumulate; toluene and hexane are expected to volatilize fairly rapidly and undergo photolytic degradation.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
 If this material becomes a waste, it would be a hazardous waste by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with all local, state, and federal regulations. User is responsible for compliance with all laws and regulations. US EPA Waste Numbers: D001, U220

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Flammable Liquid, N.O.S. (contains Hexane, Toluene), UN 1993	
DOT HAZARD CLASS / Pack Group: Class 3 / PG III REFERENCE: 49CFR, IATA, IMDG UN / NA IDENTIFICATION NUMBER: UN 1993 LABEL: Flammable Liquid, 3 HAZARD SYMBOLS: <div style="text-align: center; margin-top: 10px;">  </div>	IATA HAZARD CLASS / Pack Group: Class 3 / PG III IMDG HAZARD CLASS: Class 3 / PG III RID/ADR HAZARD CLASS: Class 3 / PG III ADR CLASSIFICATION: F1 ADR EMERGENCY ACTION CODE: 3Y Hazard Identification Number (HIN): 30 TDG Class / Pack Group: Class 3 / PG III Note: Packing Group assigned per 49CFR173.121(b).

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): Components Listed on the TSCA inventory.	
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):	
Acute Health:	YES
Chronic Health:	YES
Fire:	YES
Sudden Release of Pressure:	NO
Reactive:	NO

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SECTION 15 - REGULATORY INFORMATION (Continued)

SARA 313 REPORTABLE INGREDIENTS: Hexane, Toluene.

CERCLA (USA - Comprehensive Response Compensation and Liability Act): **4000 lb / 181 kg RQ for product as toluene.**

State Right to Know Laws: **Toluene and Hexane are on the right-to-know lists of CA, MA, MN, NJ, and PA.**

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: **WARNING! This product contains a chemical (toluene) known to the State of California to cause birth defects or other reproductive harm.**

CPR (Canadian Controlled Products Regulations): **This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations. WHMIS Classifications: B2, D2A**



IDL (Canadian Ingredient Disclosure List): **Hexane (CAS #110-54-3) and Toluene (CAS #108-88-3) are listed on the CIDL.**

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): **Components are on the DSL.**

EINECS (European Inventory of Existing Commercial Chemical Substances): **Referenced.**

WGK Water Quality Index: **2**

EU RISK PHRASES

R11 Highly flammable.

R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R62 Possible risk of impaired fertility.

R63 Possible risk of harm to the unborn child.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

EU SAFETY PHRASES

S2 Keep out of the reach of children.

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition — No smoking.

S36/37 Wear suitable protective clothing and gloves.

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

SECTION 16 - OTHER INFORMATION

Legend:

ACGIH	American Congress of Government Industrial Hygienists		
CAS	Chemical Abstracts Service		
EINECS	European Inventory of Existing Commercial Chemical Substances		
HMIS	Hazardous Materials Identification System		
IARC	International Agency for Research on Cancer		
NA	Not Available	ND	Not Determined
NE	Not Established	NR	Not Reported
NIOSH	National Institute for Occupational Safety and Health		
NTP	National Toxicology Program		
OSHA	Occupational Safety and Health Administration		

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.