



Material Safety Data Sheet
Material Name: Elmer's Glue-All Max
MSDS ID: ELM-038
Issue Date: 06/25/10
Revision 1.0000

Other Sections

[02](#) [03](#) [04](#) [05](#) [06](#) [07](#) [08](#) [09](#) [10](#) [11](#) [12](#) [13](#) [14](#) [15](#) [16](#)

***** Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION *****

Material Name: Elmer's Glue-All Max

Manufacturer Information

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.

Trade Names/Synonyms

E9406; E9415; E9416

Product Use

adhesives

***** Section 2 - HAZARDS IDENTIFICATION *****

NFPA Ratings:

Health: 2 Fire: 1 Reactivity: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

EMERGENCY OVERVIEW

Color: brown

Physical Form: liquid

Odor: musty odor

Major Health Hazards: harmful if inhaled, respiratory tract irritation, skin irritation, eye irritation, allergic reactions

Physical Hazards: May react on contact with water.

POTENTIAL HEALTH EFFECTS**Inhalation**

Short Term: irritation, allergic reactions, chest pain, difficulty breathing

Long Term: allergic reactions, difficulty breathing

Skin

Short Term: irritation, allergic reactions, skin disorders, itching, rash

Long Term: irritation, allergic reactions, rash, itching

Eye

Short Term: irritation

Long Term: irritation

Ingestion**Short Term:** gastrointestinal irritation**Long Term:** no information on significant adverse effects**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

***** Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS *****

CAS	Component	Percent
9016-87-9	POLYMETHYLENE POLYPHENYL ISOCYANATE	30-50
101-68-8	METHYLENE BISPHENYL ISOCYANATE	30-50
Not Available	NON-HAZARDOUS SUBSTANCE	10-30
108-90-7	CHLOROBENZENE	<0.01

***** Section 4 - FIRST AID MEASURES *******Inhalation**

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Skin

If bonding occurs, immerse the bonded surfaces in warm soapy water. Peel or roll the surfaces apart using a blunt edge, such as a spatula or spoon handle. Do not pull surfaces apart with a direct opposing action. If burns occur, treat as thermal burns. Get medical attention, if needed.

Eyes

If bonding to tissues occurs, wash with large amounts of warm water. Cover both eyes with sterile, dry bandages. The eye will open without further action. Do not pull surfaces apart with a direct opposing action. If burns occur, treat as thermal burns. Get medical attention.

Ingestion

Wet lips with water. Peel or roll the surfaces apart using a blunt edge, such as a spatula or spoon handle. Do not pull surfaces apart with a direct opposing action. If a lump forms in the mouth, turn head to side. If burns occur, treat as thermal burns. Get medical attention.

Note to Physicians

For inhalation, consider oxygen.

Mineral oil, vegetable oil, or petroleum jelly may help soften the bonding between skin surfaces. For skin contact, consider acetone or nitromethane.

***** Section 5 - FIRE FIGHTING MEASURES *****

See Section 9 for Flammability Properties

Flammable Properties

Slight fire hazard.

Extinguishing Media

carbon dioxide, regular dry chemical, regular foam, water

Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Hazardous Combustion Products

Combustion: cyanides, oxides of carbon, oxides of nitrogen

***** Section 6 - ACCIDENTAL RELEASE MEASURES *******Occupational spill/release**

Stop leak if possible without personal risk. **Small spills:** Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. 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 *******Handling Procedures**

Use only with adequate ventilation. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin or eyes. Wash thoroughly after handling. Do not get in eyes.

Storage Procedures

Store and handle in accordance with all current regulations and standards. Keep container tightly closed. Store in a well-ventilated area. Avoid contact with water or moisture. Store between 16 C and 38 C. A hazardous build-up of pressure could result due to a reaction with water producing carbon dioxide gas if contaminated containers are resealed. Do not reseal contaminated containers. Reseal uncontaminated containers that are free of moisture only after placing under a nitrogen blanket. Do not store in containers made of copper, copper alloys, or galvanized surfaces. See original container for storage recommendations. Keep separated from incompatible substances.

***** Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION *******Component Exposure Limits****METHYLENE BISPHENYL ISOCYANATE (101-68-8)**

ACGIH: 0.005 ppm TWA

NIOSH: 0.005 ppm TWA; 0.05 mg/m³ TWA
0.020 ppm Ceiling (10 min); 0.2 mg/m³ Ceiling (10 min)

OSHA: 0.02 ppm Ceiling; 0.2 mg/m³ Ceiling

OSHA (Vacated): 0.02 ppm Ceiling; 0.2 mg/m³ Ceiling

CHLOROBENZENE (108-90-7)

ACGIH: 10 ppm TWA

OSHA: 75 ppm TWA; 350 mg/m³ TWA

OSHA (Vacated): 75 ppm TWA; 350 mg/m³ TWA

Ventilation

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT**Eyes/Face**

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

Protective Clothing

Wear appropriate chemical resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Protective Materials

neoprene, nitrile, butyl rubber

Respiratory Protection

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.

Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100 or P100.

Any air-purifying full-facepiece respirator equipped with an N95, R95, or P95 filter. The following filters may also be used: N99, R99, P99, N100, R100 or P100.

Any powered, air-purifying respirator with a high-efficiency particulate filter.

Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter.

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

***** Section 9 - PHYSICAL AND CHEMICAL PROPERTIES *****

Physical State: Liquid	Appearance: Brown liquid
Color: brown	Physical Form: liquid
Odor: musty odor	Odor Threshold: Not available
pH: Not available	Melting/Freezing Point: Not available
Boiling Point: >300 °C (decomposes)	Flash Point: >110 °C (CC)
Evaporation Rate: Not available	OSHA Flammability Class: IIIB
Vapor Pressure: 0.000004 mmHg	Vapor Density (air = 1): 8.5
Density: Not available	Specific Gravity (water = 1): 1.129
Water Solubility: reacts, immiscible	Coeff. Water/Oil Dist: Not available
Auto Ignition: >600 °C	Viscosity: 2311 cP
Volatility: Not available	

***** Section 10 - STABILITY AND REACTIVITY *******Chemical Stability**

May react on contact with water. Closed containers may rupture.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

Materials to Avoid

acids, alcohols, amines, bases, combustible materials, metal salts, metals, oxidizing materials

Hazardous Decomposition

Water or Moisture: oxides of carbon

Hazardous Decomposition**Combustion:** cyanides, oxides of carbon, oxides of nitrogen**Possibility of Hazardous Reactions**

Polymerization may occur in the presence of metal compounds, alkalis, and tertiary amines at elevated temperatures.

***** Section 11 - TOXICOLOGICAL INFORMATION *******Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)Inhalation LC50 Rat 490 mg/m³ 4 h; Oral LD50 Rat 49 g/kg; Dermal LD50 Rabbit >9400 mg/kg**METHYLENE BISPHENYL ISOCYANATE (101-68-8)**

Oral LD50 Rat 9200 mg/kg

CHLOROBENZENE (108-90-7)

Oral LD50 Rat 1110 mg/kg

RTECS Acute Toxicity (selected)

The components of this material have been reviewed, and RTECS publishes the following endpoints:

POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)**Inhalation:** 490 mg/m³/4 hour Inhalation Rat LC50**Oral:** 49 gm/kg Oral Rat LD50**Skin:** >9400 mg/kg Skin Rabbit LD50**METHYLENE BISPHENYL ISOCYANATE (101-68-8)****Inhalation:** 178 mg/m³ Inhalation Rat LC50**Oral:** 9200 mg/kg Oral Rat LD50**Acute Toxicity Level****POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)****Highly Toxic:** inhalation.**Non Toxic:** ingestion.**METHYLENE BISPHENYL ISOCYANATE (101-68-8)****Highly Toxic:** inhalation.**Slightly Toxic:** ingestion.**CHLOROBENZENE (108-90-7)****Moderately Toxic:** inhalation, ingestion.**Component Carcinogenicity****POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)****IARC:** Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))**METHYLENE BISPHENYL ISOCYANATE (101-68-8)**

IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 19 [1979]
(Group 3 (not classifiable))

CHLOROBENZENE (108-90-7)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Irritation

See component data.

RTECS Irritation

The components of this material have been reviewed, and RTECS publishes the following endpoints:

POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)

100 mg Eyes Rabbit mild

METHYLENE BISPHENYL ISOCYANATE (101-68-8)

100 mg Eyes Rabbit moderate; 500 mg/24 hour Skin Rabbit

Local Effects

POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)

Irritant: inhalation, skin, eye.

METHYLENE BISPHENYL ISOCYANATE (101-68-8)

Irritant: inhalation, skin, eye.

CHLOROBENZENE (108-90-7)

Irritant: inhalation, skin, eye.

Target Organs

POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)

immune system (sensitizer).

METHYLENE BISPHENYL ISOCYANATE (101-68-8)

immune system (sensitizer).

CHLOROBENZENE (108-90-7)

central nervous system.

Medical Conditions Aggravated by Exposure

respiratory system (including asthma and other breathing disorders), skin disorders

RTECS Tumorigenic

The components of this material have been reviewed, and RTECS publishes data for one or more components.

RTECS Mutagenic

The components of this material have been reviewed, and RTECS publishes data for one or more components.

RTECS Reproductive Effects

The components of this material have been reviewed, and RTECS publishes data for one or more components.

Additional Data

May cross react with similar compounds.

***** Section 12 - ECOLOGICAL INFORMATION *****

Component Analysis - Aquatic Toxicity

CHLOROBENZENE (108-90-7)

Fish: 96 Hr LC50 Pimephales promelas: 7-8.5 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 4.5 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 6.9-7.9 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 4.1-4.9 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss:

4.1-5.3 mg/L [flow-through]; 96 Hr LC50 Brachydanio rerio: 91 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 36.35-58.19 mg/L [static]

Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 2.55 - 420 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 12.5 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 0.59 mg/L

***** Section 13 - DISPOSAL CONSIDERATIONS *****

Disposal Methods

Dispose in accordance with all applicable regulations.

Component Waste Numbers

CHLOROBENZENE (108-90-7)

RCRA: waste_number U037

100.0 mg/L regulatory level

***** Section 14 - TRANSPORT INFORMATION *****

US DOT Information: No Classification assigned.

TDG Information: No Classification assigned.

***** Section 15 - REGULATORY INFORMATION *****

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

POLYMETHYLENE POLYPHENYL ISOCYANATE (9016-87-9)

SARA 313: 1.0 % de minimis concentration

METHYLENE BISPHENYL ISOCYANATE (101-68-8)

SARA 313: 1.0 % de minimis concentration

CERCLA: 5000 lb final RQ; 2270 kg final RQ

CHLOROBENZENE (108-90-7)

SARA 313: 1.0 % de minimis concentration

CERCLA: 100 lb final RQ; 45.4 kg final RQ

TSCA 12b: Section 4, 1 %

SARA 311/312

Acute Health: Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
POLYMETHYLENE POLYPHENYL ISOCYANATE	9016-87-9	No	No	No	Yes	No	No
METHYLENE BISPHENYL ISOCYANATE	101-68-8	Yes	Yes	Yes	Yes	Yes	Yes

CHLOROBENZENE	108-90-7	Yes	Yes	Yes	Yes	Yes	Yes
---------------	----------	-----	-----	-----	-----	-----	-----

Not regulated under California Proposition 65

Canada WHMIS

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

METHYLENE BISPHENYL ISOCYANATE (101-68-8)

0.1 %

U.S. Inventory (TSCA)

All the components of this substance are listed on or are exempt from the inventory.

Component Analysis - Inventory

Component	CAS	US	CA
POLYMETHYLENE POLYPHENYL ISOCYANATE	9016-87-9	Yes	DSL
METHYLENE BISPHENYL ISOCYANATE	101-68-8	Yes	DSL
CHLOROBENZENE	108-90-7	Yes	DSL

*** Section 16 - OTHER INFORMATION ***

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

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.

“RTECS®” is a United States trademark owned and licensed under authority of the U.S. Government, by and through Symyx Software, Inc. Portions ©Copyright 2010, U.S. Government. All rights reserved.

New MSDS: 6/24/2010