

Section 1 Chemical Product and Company Identification

Product Identifier GPC® Epoxy Hardener
Product Number IR-CNT4041, IR-CNT4021
General Use Used in making counters for stamping dies
Company Address UEI Systems®, a UEI Group Company
 9090 Nieman Road
 Overland Park, KS 66214 USA
Phone +1 800 221 9059 or +1 913 541 0503
Emergency Contact Number CHEMTREC – Available 24 hours/day, 7 days/week
 Domestic North America: +1 800 424 9300
 International: +1 703 527 3887

Section 2 Hazards Identification

GHS Classification

Hazard Class	Hazard Category	Route of Exposure
Acute Toxicity	4	Oral
Acute Toxicity	1	Inhalation
Acute Toxicity	4	Dermal
Skin Corrosion	1B	–
Serious Eye Damage	1	–
Skin Sensitization	1	–
Specific to Target Organ Toxicity (Single Exposure)	3	Respiratory
Reproductive Toxicity	2	–

GHS Labeling

Contains Diethylenetriamine 111-40-0 4, 4'-Isopropylidenediphenol 80-05-7



Danger

Hazard Statements Harmful if swallowed or in contact with skin
 Causes severe skin burns and eye damage
 May cause an allergic skin reaction
 Causes serious eye damage
 Fatal if inhaled
 May cause respiratory irritation
 Suspected of damaging fertility or the unborn child.
 Toxic to aquatic life with long lasting effects

Section 2 Hazards Identification, continued

- Precautionary Statements** Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray
Wash skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection
Wear respiratory protection
Avoid release to the environment
- Response** **If swallowed:** Call a **Poison Center** or doctor/physician if you feel unwell. Rinse mouth. Do **not** induce vomiting.
If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a **Poison Center** or doctor/physician.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a **Poison Center** or doctor/physician.
If skin irritation or rash occurs: Get medical advice/attention.
If exposed or concerned: Get medical advice/ attention.
Collect spillage.
Wash contaminated clothing before reuse.
- Storage** Store in a well-ventilated place. Keep container tightly closed.
Store locked up
- Disposal** Dispose of contents/container to an approved waste disposal plant.

Section 3 Hazardous Ingredients / Identity Information

Hazardous Components	CAS No.	%	OSHA (PEL/TWA)	ACGIH TLV
Polyethylene polyamine epoxy adduct	–	–	–	–
Diethylenetriamine	111-40-0	–	1 ppm	1 ppm
4, 4'-Isopropylidenediphenol	80-05-7	–	5 mg/m ³	5 mg/m ³

Section 4 First Aid Measures

- In all cases, consult a physician.**
- General Advice** Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
- If Inhaled** If breathed in, move person into fresh air. If not breathing, give artificial respiration.
- Skin Contact** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital.
- Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes. Continue rinsing eyes during transport to hospital.
- If Swallowed** Do **not** induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5 Firefighting Measures

Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Specific Hazards Arising from Chemical Carbon oxides, Nitrogen oxides (NOx)

Special Protective Equipment for Firefighters Wear self-contained breathing apparatus for firefighting, if necessary

Section 6 Accidental Release Measures

Personal Precautions for Emergency Responders Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for Cleaning Up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7 Handling and Storage

Handling Precautions Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see Section 2.

Storage Requirements Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8 Component Exposure Limits

Control Parameters

Hazardous Components	CAS No.	%	OSHA (PEL/TWA)	ACGIH TLV
Polyethylene polyamine epoxy adduct	-	-	-	-
Diethylenetriamine	111-40-0	-	1 ppm	1 ppm
4, 4'-Isopropylidenediphenol	80-05-7	-	5 mg/m ³	5 mg/m ³

Appropriate Engineering Controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Eye/Face Protection Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection Wear complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Control of Environmental Exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9 Physical and Chemical Properties

Appearance/Odor	Amber, viscous liquid/Aminic	Odor Threshold	No data available
pH	No data available	Melting Point/Freezing Point	-31° F (-35° C)
Boiling Point	>405° F (207° C)	Flash Point	221° F (105° C) (ASTM D-93/PMCC)
Evaporation Rate	No data available	Flammability Class	No data available
Lower Explosive Limit	1.4% (V)	Upper Explosive Limit	6.7% (V)
Vapor Pressure	< 13.33 Pa @ 68° F (20° C)	Vapor Density	No data available
Relative Density	ca. 1,090 kg/m ³ at 77° F (25° C)	Solubility (H₂O)	Partially soluble
Partition Coefficient	No data available	Auto Ignition	No data available
Decomposition Temperature	No data available	Viscosity	60–50 Pa·s @ 77° F (25° C)
Explosive Properties	No data available	Oxidizing Properties	No data available

Section 10 Chemical Stability and Reactivity

Stability	Hygroscopic
Chemical Stability	Stable under recommended storage conditions
Hazardous Reactions	No data available
Conditions to Avoid	Exposure to water vapor; heat, flames and sparks
Incompatibility	Strong oxidizing agents, strong acids, copper
Hazardous Decomposition/ By-Products	Nitrogen oxides, carbon monoxide and unidentified organic compounds

Section 11 Toxicological Information

Acute Toxicity	
Oral LD50	1,080 mg/kg (rat)
LC50 Inhalation	4 h 0.3 mg/l (rat)
LD50 Dermal	1,090 mg/kg (rabbit)
Skin Corrosion/Irritation	Open irritation test (rabbit)
Serious Eye Damage/Irritation	Severe eye irritation 24 h (rabbit)
Respiratory or Skin Sensitisation	No data available
Germ Cell Mutagenicity	Ames test <i>S. typhimurium</i> Result: negative
Carcinogenicity	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA
Reproductive Toxicity	No data available

Section 11 Toxicological Information, continued

Specific Target Organ Toxicity
Single Exposure May cause respiratory irritation

Specific Target Organ Toxicity
Repeated Exposure No data available

Aspiration Hazard No data available

Section 12 Ecological Information

Toxicity
Acute Aquatic Toxicity
Chronic Aquatic Toxicity

Component	Species	Exposure Time	LC50/EC50/IC50
4,4 Isopropylidenediphenol (80-05-7)	<i>Pimephales promelas</i> (fathead minnow)	96 hrs	LC50 4.6 mg/l
	<i>Daphnia magna</i> (water flea)	48 hrs	EC50 10.2 mg/l
	<i>Pseudokirchneriella subcapitata</i> (green algae)	96 hrs	EC50 2.73–3.1 mg/l

Persistence/Degradability Expected to be not readily biodegradable

Bioaccumulative Potential Not expected to bioaccumulate significantly

Mobility in Soil No data available

Results of PBT and vPvB Assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other Adverse Effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

Section 13 Disposal Considerations

Disposal Instructions Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.

Section 14 Transportation Information

DOT (US)		IMDG		IATA	
UN number	2079	UN number	2079	UN number	2079
Class	8	Class	8	Class	8
Packing group	II	Packing group	II	Packing group	II
Proper shipping name		EMS-No	F-A, S-B	Proper shipping name	
Diethylenetriamine		Proper shipping name		Diethylenetriamine	
Reportable Quantity (RQ)	–	Diethylenetriamine			
Poison Inhalation Hazard	–				

Section 15 Regulatory Information

SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.		
SARA 313 Components	The following components are subject to reporting levels established by SARA Title III, Section 313:		
	Components	CAS-No	Revision Date
	Bisphenol A	80-05-7	2007-07-01
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard		
	Right To Know Components	CAS-No	Revision Date
Massachusetts	Diethylenetriamine	111-40-0	1994-04-01
	Bisphenol A	80-05-7	2007-07-01
Pennsylvania	Diethylenetriamine	111-40-0	1994-04-01
	Bisphenol A	80-05-7	2007-07-01
New Jersey	Diethylenetriamine	111-40-0	1994-04-01
	Bisphenol A	80-05-7	2007-07-01
California Prop 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.		

Section 16 Other Information

UEI Systems® provides the information contained herein in good faith. It is believed to be correct. However it is not all-inclusive and should be used only as a guide. Individuals receiving this information must exercise their independent judgement in determining its appropriateness for a particular purpose. UEI Systems shall not be held liable for any damage resulting from handling or from contact with this product. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources.

Abbreviations **PEL** Permissible Exposure Limit
TLV Threshold Limit Value

- End Notes**
1. SARA - Signed into law in 1986, the Superfund Amendments and Reauthorization Act (SARA) is an extension of CERCLA, and is intended to encourage and support local and state emergency planning efforts. SARA provides citizens and local governments with information about potential chemical hazards, and calls for facilities that store hazardous materials to provide officials and citizens with data on the type and amount on hand at specific locations. This field states whether a material is listed or not listed in section 372.65 of SARA. EHS - This states if a material is listed or not listed in Appendix B to part 355, the SARA Extremely Hazardous Substances (EHS) section. RQ is the reportable quantity. TPQ is the Threshold Planning Quantity.
 2. RCRA - The Resource Conservation and Recovery Act enacted in 1976 and subsequently amended, controls solid-waste disposal and encourages recycling. This states whether a material is listed or not listed under this regulation. If listed the Hazardous Waste Number and waste characterization assigned by RCRA is also provided.
 3. CERCLA - Enacted in 1980 and amended thereafter, the Comprehensive Environmental Response, Compensation, and Liability Act provides for identification and cleanup of hazardous materials released on land, into the air, waterways, and groundwater. It covers areas affected by newly released materials and older leaking or abandoned dump sites. This states whether a material is listed or not listed in CERCLA Table 302.4. If listed the section(s) that it is listed under and the Reportable Quantity (RQ) are also provided.
 4. TSCA - The Toxic Substances Control Act controls the exposure to and use of raw industrial chemicals not subject to other laws. This states whether the chemical is listed or not listed under this regulation.

Evidence <http://toxnet.nlm.nih.gov/>

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