



## KAST EZ RESIN Part A

P280: Wear protective gloves, protective clothing, eye protection and face protection.

P285: In case of inadequate ventilation wear respiratory protection.

**Response:**

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313: IF exposed or concerned: Get medical advice.

**Storage:**

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	Wt.%	CAS
4,4'-Diphenylmethane diisocyanate	40 - 55	101-68-8
2,2-dimethyl-1-(methylethyl)-1,3-propanediyl bis(2-methylpropanoate)	25 - 50	6846-50-0
Diphenylmethane diisocyanate, homopolymer	10 - 20	39310-05-9
Triethyl phosphate	<= 2	78-40-0

**4. FIRST AID MEASURES**

**EYES:** Immediately flush eyes with water for at least 15 minutes. Remove contact lenses, if present. Obtain medical attention without delay.

**SKIN:** Immediately flush skin with water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention for severe exposure or if irritation persists.

**INGESTION:** Obtain immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

**INHALATION:** Move person to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If not breathing, give artificial respiration. Obtain medical attention. Symptoms can be delayed for several hours.

**5. FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Water fog, foam, dry chemical or carbon dioxide.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon oxides, nitrogen oxides, isocyanates and trace amounts of hydrogen cyanide.

**EXPLOSION HAZARDS:** Water contamination produces carbon dioxide gas. This may cause pressurization or explosion of containers.

**FIRE FIGHTING EQUIPMENT:** Exposed firefighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing.

**6. ACCIDENTAL RELEASE MEASURES**

**SMALL SPILL:** Isolate the area and prevent entry of unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled product. Absorb with dry chemical absorbent, earth, sand or any other inert material. Place in a chemical waste container. Allow to stand uncovered 48 hours before closing container.

**LARGE SPILL:** Isolate the area and prevent entry of unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled product. Create a dike or trench to contain product. Prevent entry into waterways, sewers, basements or confined areas. Absorb with dry chemical absorbent, earth, sand or any other inert material. Place in a chemical waste container. Allow to stand uncovered 48 hours before closing container.



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**GENERAL PROCEDURES:** Clean spill area with a decontamination solution. Suggested formulation: Sodium carbonate (5 - 10%), liquid detergent (1 - 2%), water (88 - 94%). Alternate formulation: Concentrated ammonia (3 - 8%), liquid detergent (1 - 2%), water (90 - 96%). Ensure adequate ventilation to prevent overexposure of ammonia.

**SPECIAL PROTECTIVE EQUIPMENT:** Wear protective equipment listed in Section 8.

## 7. HANDLING AND STORAGE

**HANDLING:** Do not get in eyes, on skin or on clothing. Wash hands before eating, drinking or smoking. Do not breathe vapors or mists. Use only with adequate ventilation. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

**STORAGE:** Store in tightly closed containers in a cool, dry and well-ventilated area away from heat or sources of ignition. Keep out of direct sunlight.

**STORAGE TEMPERATURE:** 4.4°C (40°F) Minimum to 37.8°C (100°F) Maximum

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
4,4'-Diphenylmethane diisocyanate	TWA	0.02 Ceiling	0.20 Ceiling	0.005	0.051

**ENGINEERING CONTROLS:** Local exhaust ventilation used in combination with general ventilation as necessary to control air contaminants.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear a face shield and chemical safety glasses or goggles.

**SKIN:** Wear impervious gloves. Cover exposed skin.

**RESPIRATORY:** For airborne exposure above the permissible exposure limit(s), wear a NIOSH approved air-purifying respirator equipped with organic vapor cartridges. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator.

**WORK HYGIENIC PRACTICES:** Avoid eating, drinking or smoking while using this material. Wash hands thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Musty.

**APPEARANCE:** Light yellow liquid.

**FLASH POINT AND METHOD:** > 93.3°C (200°F) Closed cup.

**AUTOIGNITION TEMPERATURE:** Not established.

**VAPOR DENSITY:** Heavier than air.

**BOILING POINT:** > 260°C (500°F)

**FREEZING POINT:** Not established.

**SOLUBILITY IN WATER:** Insoluble, reacts with water.

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**SPECIFIC GRAVITY:** 1.1 (water = 1) at 23,3°C (74°F)

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.

**POLYMERIZATION:** Can be caused by elevated temperatures.

**CONDITIONS TO AVOID:** Temperatures above 300 °F (148.9 °C).

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon oxides, nitrogen oxides, isocyanates and trace amounts of hydrogen cyanide.

**INCOMPATIBLE MATERIALS:** Amines, strong bases, alcohols, water, copper and copper alloys.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
4,4'-Diphenylmethane diisocyanate	> 10000 mg/kg	> 9400 mg/kg	0.49 mg/L/4h (respirable aerosol)
2,2-dimethyl-1-(methylethyl)-1,3-propanediyl bis(2-methylpropanoate)	> 3200 mg/kg	> 18900 mL/kg (guinea pig)	453 ppm/6h
Triethyl phosphate	1165 mg/kg	> 20 mL/kg (guinea pig)	2050 ppm/6h

### CARCINOGENICITY

**IARC:** Not regulated as a carcinogen.

**NTP:** Not regulated as a carcinogen.

**OSHA:** Not regulated as a carcinogen.

**SENSITIZATION:** This material is a skin and respiratory sensitizer.

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** MDI: LC<sub>50</sub> (Brachydanio rerio) >500 mg/L/24h; EC<sub>50</sub> (Daphnia magna) 7060 mg/L/24h

**BIOACCUMULATION/ACCUMULATION:** In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominately insoluble polyureas.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose in accordance with local, state, provincial or national regulations.

**EMPTY CONTAINER:** Decontaminate and pass to an approved drum recycler or destroy.

**RCRA/EPA WASTE INFORMATION:** If discarded in its purchased form, this material is not a RCRA hazardous waste.

**GENERAL COMMENTS:** The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured into drains, sewers or waterways.

## 14. TRANSPORT INFORMATION



## KAST EZ RESIN Part A

**DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME:** Not regulated when shipped below RQ.**AIR (ICAO/IATA)****SHIPPING NAME:** Not regulated.**VESSEL (IMO/IMDG)****SHIPPING NAME:** Not regulated.**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****311/312 HAZARD CATEGORIES:** Acute, Chronic, Reactive.**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

Chemical Name	Wt.%	CAS	Comments
4,4'-Diphenylmethane diisocyanate	40 - 55	101-68-8	Diisocyanates category

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

Chemical Name	Wt.%	CERCLA RQ
4,4'-Diphenylmethane diisocyanate	40 - 55	5000 lbs.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)****TSCA REGULATORY:** All components are in TSCA inventory.**RCRA STATUS:** If discarded in its purchased form, this material is not a RCRA hazardous waste.**NATIONAL RESPONSE CENTER:** Any spill or release to the environment above the RQ must be reported to the National Response Center (800-424-8802).**16. OTHER INFORMATION****PREPARED BY:** F McCormick**COMMENTS:**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
EC <sub>50</sub>	Median effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC <sub>50</sub>	Lethal concentration to 50% of exposed laboratory animals
LD <sub>50</sub>	Lethal dose to 50% of exposed laboratory animals
TWA	Time-weighted average
TLV	Threshold limit value
NIOSH	US National Institute of Occupational Safety and Health
NE	Not established
NTP	US National Toxicology Program
OEL	Occupational exposure limit
OSHA	US Occupational Safety Health Administration
PEL	Permissible exposure limit
RQ	Reportable quantity
STEL	Short term exposure limit

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## SAFETY DATA SHEET

### KAST EZ RESIN Part A

Date Issued : 4/15/2015

SDS No : SDS 10001

Date Revised : 4/15/2015

Revision No : 1

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** KAST EZ RESIN Part A**MANUFACTURER**  
ENVIRONMOLDS, LLC

18 Bank Street / Suite 1

Summit, NJ 07901

Customer Service: 1-866-278-6653

**24 HR. EMERGENCY TELEPHONE NUMBERS**

Poison Control Center (Medical) : (877) 800-5553

CHEMTREC (US Transportation) : (800) 424-9300

#### 2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATIONS****Health:**

Eye Irritation, Category 2

**GHS LABEL**Exclamation  
mark**SIGNAL WORD:** WARNING**HAZARD STATEMENTS**

H319: Causes serious eye irritation.

**PRECAUTIONARY STATEMENT(S)****Prevention:**

P264: Wash hands thoroughly after handling.

P260: Wear eye and face protection.

**Response:**

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical attention.

#### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
2,2-dimethyl-1-(methylethyl)-1,3-propanediyl bis(2-methylpropanoate)	45 - 55	6846-50-0
Hydroxy terminated poly(oxyalkyated) polyol	20 - 30	102-60-3



#### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with water for at least 10 minutes. Remove contact lenses, if present. Obtain medical attention.

**SKIN:** Wash with soap and water. Seek medical attention if irritation persists.

**INGESTION:** Do not induce vomiting. Give one or two glasses of water to drink. Never give anything by mouth to an unconscious person. If large amounts are swallowed or if symptoms develop, seek medical attention.

**INHALATION:** Move person to fresh air. If symptoms develop, seek medical attention.

#### 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray, foam, dry chemical or carbon dioxide. Do not spray water directly into container due to danger of boilover.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon oxides and nitrogen oxides.

**FIRE FIGHTING PROCEDURES:** Do not use direct water stream as this may spread the fire. Use water spray to cool fire-exposed containers.

**FIRE FIGHTING EQUIPMENT:** Exposed firefighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing.

#### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Isolate the area and prevent entry of unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled product. Absorb with dry chemical absorbent, earth, sand or any other inert material. Place in a chemical waste container.

**LARGE SPILL:** Isolate the area and prevent entry of unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled product. May be a slipping hazard. Create a dike or trench to contain product. Prevent entry into waterways, sewers, basements or confined areas. Absorb with dry chemical absorbent, earth, sand or any other inert material. Place in a chemical waste container.

**SPECIAL PROTECTIVE EQUIPMENT:** Wear protective equipment listed in Section 8.

#### 7. HANDLING AND STORAGE

**HANDLING:** Do not get in eyes, on skin or on clothing. Wash hands before eating, drinking or smoking. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

**STORAGE:** Store in tightly closed containers in a cool, dry and well-ventilated area away from heat or sources of ignition. Keep out of direct sunlight.

**STORAGE TEMPERATURE:** 4.4°C (40°F) Minimum to 37.8°C (100°F) Maximum

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** If used at elevated temperatures or in confined space, ventilation may be required to control mists.

##### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear a face shield and chemical safety glasses or goggles.

**SKIN:** Wear impervious gloves. Cover exposed skin.

**RESPIRATORY:** None required in normal use.

**WORK HYGIENIC PRACTICES:** Avoid eating, drinking or smoking while using this material. Wash hands thoroughly after handling.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Slightly fruity.

**APPEARANCE:** Colorless liquid.

**FLASH POINT AND METHOD:** > 93.3°C (200°F)

**AUTOIGNITION TEMPERATURE:** Not established.

**BOILING POINT:** > 148.9°C (300°F)

**FREEZING POINT:** Not established.

**SOLUBILITY IN WATER:** Slight.

**SPECIFIC GRAVITY:** 0.99 at 23.3°C (74°F)

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.

**POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Moisture and high temperatures.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon oxides and nitrogen oxides.

**INCOMPATIBLE MATERIALS:** Strong oxidizers.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
2,2-dimethyl-1-(methylethyl)-1,3-propanediyl bis(2-methylpropanoate)	> 3200 mg/kg	> 20 mL/kg	453 ppm/6h
Hydroxy terminated poly(oxyalkylated) polyol	3280 mg/kg	> 2000 mg/kg	

### CARCINOGENICITY

**IARC:** Not regulated as a carcinogen.

**NTP:** Not regulated as a carcinogen.

**OSHA:** Not regulated as a carcinogen.

## 12. ECOLOGICAL INFORMATION

**COMMENTS:** No data.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose in accordance with local, state, provincial or national regulations.

**EMPTY CONTAINER:** Decontaminate and pass to an approved drum recycler or destroy.

**RCRA/EPA WASTE INFORMATION:** If discarded in its purchased form, this material is not a RCRA hazardous waste.

**GENERAL COMMENTS:** The generation of waste should be avoided or minimized whenever possible. Chemical waste, even

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small quantities, should never be poured into drains, sewers or waterways.

## 14. TRANSPORT INFORMATION

## DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated.

## AIR (ICAO/IATA)

SHIPPING NAME: Not regulated.

## VESSEL (IMO/IMDG)

SHIPPING NAME: Not regulated.

## 15. REGULATORY INFORMATION

## UNITED STATES

## SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute.

313 REPORTABLE INGREDIENTS: None.

## CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: None.

## TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components are in TSCA inventory.

RCRA STATUS: If discarded in its purchased form, this material is not a RCRA hazardous waste.

## 16. OTHER INFORMATION

PREPARED BY: E McCormick

## COMMENTS:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
EC <sub>50</sub>	Median effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC <sub>50</sub>	Lethal concentration to 50% of exposed laboratory animals
LD <sub>50</sub>	Lethal dose to 50% of exposed laboratory animals
TWA	Time-weighted average
TLV	Threshold limit value
NIOSH	US National Institute of Occupational Safety and Health
NE	Not established
NTP	US National Toxicology Program
OEL	Occupational exposure limit
OSHA	US Occupational Safety Health Administration
PEL	Permissible exposure limit



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RC	Reportable quantity
STEL	Short term exposure limit

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