



## Safety Data Sheet

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<b>Document Group:</b>	29-1688-0	<b>Version Number:</b>	3.00
<b>Issue Date:</b>	12/01/14	<b>Supercedes Date:</b>	12/01/14

### Product identifier

UPS 305 EG '60' DUROMETER PASTE GRADE ELASTOMER KIT

### ID Number(s):

UPS 305 EG '60'

### Recommended use

Coating, Elastomeric repair compound.

### Supplier's details

**MANUFACTURER:** UNIQUE POLYMER SYSTEMS LTD, UNIT 1 BANKSIDE INDUSTRIAL ESTATE, LITTLE MARCLE ROAD, LEDBURY, HEREFORDSHIRE, HR8 2DR, UNITED KINGDOM

**Telephone:** +44(0) 1531 636300

### Emergency telephone number

+44(0) 1531 636300

**This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:**

28-5988-2, 28-4284-7, 29-1401-8

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<b>Document Group:</b>	28-4284-7	<b>Version Number:</b>	3.00
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### SECTION 1: Identification

#### 1.1. Product identifier

UPS 305 EG '60' DUROMETER PASTE GRADE ELASTOMER BASE

#### Product Identification Numbers

UPS 305 EG '60' BASE

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Coating, Elastomeric repair compound.

##### Supplier's details

**MANUFACTURER:** UNIQUE POLYMER SYSTEMS LTD, UNIT 1 BANKSIDE INDUSTRIAL ESTATE, LITTLE MARCLE ROAD, LEDBURY, HEREFORDSHIRE, HR8 2DR, UNITED KINGDOM

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### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Health Hazard |

##### Pictograms



**Hazard Statements**

Causes serious eye irritation.  
 Causes skin irritation.  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 May cause an allergic skin reaction.

**Precautionary Statements**

**Prevention:**

Avoid breathing dust/fume/gas/mist/vapors/spray.  
 In case of inadequate ventilation wear respiratory protection.  
 Wear eye/face protection.  
 Wear protective gloves.  
 Wash thoroughly after handling.  
 Contaminated work clothing must not be allowed out of the workplace.

**Response:**

IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 If experiencing respiratory symptoms: 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.  
 If eye irritation persists: Get medical advice/attention.  
 IF ON SKIN: Wash with plenty of soap and water.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 Take off contaminated clothing and wash it before reuse.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**2.3. Hazards not otherwise classified**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

91% of the mixture consists of ingredients of unknown acute dermal toxicity.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
POLYPROPYLENE GLYCOL-ISOPHORONE DIISOCYANATE COPOLYMER	39323-37-0	85 - 95 Trade Secret *
ISOPHORONE DIISOCYANATE	4098-71-9	< 1.7 Trade Secret *
NON-HAZARDOUS MATERIALS	Mixture	1 - 10

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

**Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

**SECTION 5: Fire-fighting measures**

**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**Hazardous Decomposition or By-Products**

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	During Combustion

**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. 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 SDS. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial or professional use only. Do not use in a confined area with minimal air exchange. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
FREE ISOCYANATES	4098-71-9	Manufacturer determined	TWA:0.005 ppm;STEL:0.02 ppm	
ISOPHORONE DIISOCYANATE	4098-71-9	ACGIH	TWA:0.005 ppm	
NON-HAZARDOUS MATERIALS	Mixture	CMRG	CEIL:5 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

#### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

##### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective

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clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Nitrile Rubber  
Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Nitrile  
Apron - polymer laminate

### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Liquid
<b>Specific Physical Form:</b>	Paste
<b>Odor, Color, Grade:</b>	Musty odor; Opaque color
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Boiling Point</b>	>=212 °F
<b>Flash Point</b>	>=100 °C [ <i>Test Method:</i> Closed Cup]
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	17 mmHg [ <i>@ 25 °C</i> ]
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	1.08 g/ml
<b>Specific Gravity</b>	1.08 [ <i>Ref Std:</i> WATER=1]
<b>Solubility in Water</b>	Negligible
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	>=400 °C
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	<i>No Data Available</i>
<b>Volatile Organic Compounds</b>	0 g/l [ <i>Test Method:</i> Estimated] [ <i>Details:</i> EU Definition (Part A and B mix)]
<b>Percent volatile</b>	0 % weight

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

Accelerators

Alcohols

Amines

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Strong acids

Strong bases

Strong oxidizing agents

**10.6. Hazardous decomposition products**

**Substance**

**Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

**SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

**11.1. Information on Toxicological effects**

**Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

**Inhalation:**

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

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

**Skin Contact:**

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

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

**Ingestion:**

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



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**Additional Information:**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
NON-HAZARDOUS MATERIALS	Dermal	Rabbit	LD50 > 5,000 mg/kg
NON-HAZARDOUS MATERIALS	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
NON-HAZARDOUS MATERIALS	Ingestion	Rat	LD50 > 5,110 mg/kg
ISOPHORONE DIISOCYANATE	Dermal	Rat	LD50 > 7,000 mg/kg
ISOPHORONE DIISOCYANATE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.03 mg/l
ISOPHORONE DIISOCYANATE	Ingestion	Rat	LD50 4,815 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
NON-HAZARDOUS MATERIALS	Rabbit	No significant irritation
ISOPHORONE DIISOCYANATE	Rabbit	Corrosive

**Serious Eye Damage/Irritation**

Name	Species	Value
NON-HAZARDOUS MATERIALS	Rabbit	No significant irritation
ISOPHORONE DIISOCYANATE	Rabbit	Corrosive

**Skin Sensitization**

Name	Species	Value
NON-HAZARDOUS MATERIALS	Human and animal	Not sensitizing
ISOPHORONE DIISOCYANATE	Guinea pig	Sensitizing

**Respiratory Sensitization**

Name	Species	Value
ISOPHORONE DIISOCYANATE	Human	Sensitizing

**Germ Cell Mutagenicity**

Name	Route	Value
NON-HAZARDOUS MATERIALS	In Vitro	Not mutagenic
ISOPHORONE DIISOCYANATE	In vivo	Not mutagenic
ISOPHORONE DIISOCYANATE	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
NON-HAZARDOUS MATERIALS	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure
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					<b>Duration</b>
NON-HAZARDOUS MATERIALS	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
NON-HAZARDOUS MATERIALS	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
NON-HAZARDOUS MATERIALS	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
ISOPHORONE DIISOCYANATE	Inhalation	Not toxic to female reproduction	Rat	NOAEL 0.004 mg/l	during gestation
ISOPHORONE DIISOCYANATE	Inhalation	Not toxic to male reproduction	Rat	NOAEL 0.004 mg/l	4 weeks
ISOPHORONE DIISOCYANATE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.001 mg/l	during gestation

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ISOPHORONE DIISOCYANATE	Dermal	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 7,000 mg/kg	24 hours
ISOPHORONE DIISOCYANATE	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	NOAEL 0.00025 mg/l	4 weeks
ISOPHORONE DIISOCYANATE	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL Not available	not applicable

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
NON-HAZARDOUS MATERIALS	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
ISOPHORONE DIISOCYANATE	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.00025 mg/l	4 weeks

**Aspiration Hazard**

Name	Value

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

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Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

For Transport Information, please call +44(0)1531 636300

**SECTION 15: Regulatory information**

**15.1. US Federal Regulations**

Contact UPS for more information.

**311/312 Hazard Categories:**

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

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

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
ISOPHORONE DIISOCYANATE	4098-71-9	< 1.7
ISOPHORONE DIISOCYANATE (DIISOCYANATES (CERTAIN CHEMICALS ONLY))	4098-71-9	< 1.7

**15.2. State Regulations**

Contact UPS for more information.

**15.3. Chemical Inventories**

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact UPS for more information.

#### 15.4. International Regulations

Contact UPS for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### SECTION 16: Other information

#### NFPA Hazard Classification

**Health: 2 Flammability: 1 Instability: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response 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.

#### HMIS Hazard Classification

**Health: \*2 Flammability: 1 Physical Hazard: 0 Personal Protection: X** - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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### SECTION 1: Identification

#### 1.1. Product identifier

UPS 305 EG '60' DUROMETER PASTE GRADE ELASTOMER ACTIAVTOR

#### Product Identification Numbers

UPS 305 EG '60' ACTIAVTOR

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Coating, Elastomeric repair compound.

##### Supplier's details

**MANUFACTURER:** UNIQUE POLYMER SYSTEMS LTD, UNIT 1 BANKSIDE INDUSTRIAL ESTATE, LITTLE MARCLE ROAD, LEDBURY, HEREFORDSHIRE, HR8 2DR, UNITED KINGDOM

**Telephone:** +44(0) 1531 636300

##### Emergency telephone number

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### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2B.

Carcinogenicity: Category 2.

Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Health Hazard |

##### Pictograms



**Hazard Statements**

Causes eye irritation.  
 Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure:  
 liver |

endocrine system |

**Precautionary Statements**

**Prevention:**

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.  
 Wear protective gloves.  
 Do not eat, drink or smoke when using this product.  
 Wash thoroughly after handling.

**Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 If eye irritation persists: Get medical advice/attention.  
 IF exposed or concerned: Get medical advice/attention.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**2.3. Hazards not otherwise classified**

None.

5% of the mixture consists of ingredients of unknown acute oral toxicity.  
 5% of the mixture consists of ingredients of unknown acute dermal toxicity.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	25791-96-2	20 - 30 Trade Secret *
CALCIUM CARBONATE	471-34-1	10 - 20 Trade Secret *
DIETHYLTOLUENEDIAMINE	68479-98-1	1 - 10 Trade Secret *
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	112945-52-5	1 - 10 Trade Secret *
CARBON BLACK	1333-86-4	0.5 - 5 Trade Secret *
PROPRIETARY ZINC COMPOUNDS	Trade Secret*	1 - 5 Trade Secret *
NON-HAZARDOUS INGREDIENTS	Mixture	1- 5

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BISMUTH TRINEODECANOATE	34364-26-6	1- 5 Trade Secret *
DIISONONYL PHTHALATE	28553-12-0	1- 5 Trade Secret *
POLYETHYLENE GLYCOL	25322-68-3	1- 5 Trade Secret *
POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-HYDRO-.OMEGA.-HYDROXY-	25322-69-4	1- 5 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### **Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

#### **Skin Contact:**

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### **Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### **If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

#### **Hazardous Decomposition or By-Products**

##### Substance

Aldehydes  
Carbon monoxide  
Carbon dioxide  
Oxides of Nitrogen

##### Condition

During Combustion  
During Combustion  
During Combustion  
During Combustion

### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Contain spill. 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 physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. 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 SDS. Seal the container. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

### 7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from strong bases. Store away from oxidizing agents.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
SILICA, AMORPHOUS	112945-52-5	OSHA	TWA concentration:0.8 mg/m <sup>3</sup> ;TWA:20 millions of particles/cu. ft.	
CARBON BLACK	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m <sup>3</sup>	A3: Confirmed animal carcin.
CARBON BLACK	1333-86-4	OSHA	TWA:3.5 mg/m <sup>3</sup>	
CARBON BLACK	1333-86-4	CMRG	TWA:0.5 mg/m <sup>3</sup>	
POLYETHYLENE GLYCOL	25322-68-3	AIHA	TWA(as particulate):10 mg/m <sup>3</sup>	
POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-HYDRO.-OMEGA.-HYDROXY-	25322-69-4	AIHA	TWA(as aerosol):10 mg/m <sup>3</sup>	
CALCIUM CARBONATE	471-34-1	CMRG	TWA:10 mg/m <sup>3</sup> ;STEL:20 mg/m <sup>3</sup>	
Limestone	471-34-1	OSHA	TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>	
DIETHYLTOLUENEDIAMINE	68479-98-1	CMRG	TWA:0.02 ppm(0.13 mg/m <sup>3</sup> )	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average



STEL: Short Term Exposure Limit  
 CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Nitrile Rubber

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Liquid
<b>Specific Physical Form:</b>	Paste
<b>Odor, Color, Grade:</b>	Slight odor; Black color
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	$\geq 100$ °C
<b>Flash Point</b>	100 °C [ <i>Test Method:</i> Closed Cup]
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	<i>No Data Available</i>
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	1.150 g/ml
<b>Specific Gravity</b>	1.150 [ <i>Test Method:</i> Estimated]
<b>Solubility in Water</b>	Negligible
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>

<b>Autoignition temperature</b>	$\geq 400$ °C
<b>Decomposition temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Organic Compounds</b>	0 g/l [Test Method: Estimated] [Details: EU Definition (Part A and B mix)]
<b>Percent volatile</b>	0 % weight

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Accelerators  
Amines  
Strong acids  
Strong bases  
Strong oxidizing agents

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

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

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**Skin Contact:**

Contact with the skin during product use is not expected to result in significant irritation.

**Eye Contact:**

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

**Ingestion:**

May be harmful if swallowed.

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

May cause target organ effects after ingestion.

**Target Organ Effects:**

**Prolonged or repeated exposure may cause:**

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

Endocrine Effects: Signs/symptoms may include disruption of gonadal, thyroid, adrenal, or pancreatic function; changes in hormone production; alterations in circulating hormone levels; and/or changes in tissue response to hormones.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

Inгредиент	C.A.S. No.	Class Description	Regulation
CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

**Additional Information:**

Increased numbers of tumors in the liver, thyroid, and possibly the mammary glands were observed in rats given DETDA (CAS No. 68479-98-1) in their diet for two years.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Dermal	Rat	LD50 > 2,000 mg/kg
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Ingestion	Rat	LD50 4,600 mg/kg
CALCIUM CARBONATE	Dermal	Rat	LD50 > 2,000 mg/kg
CALCIUM CARBONATE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.0 mg/l
CALCIUM CARBONATE	Ingestion	Rat	LD50 6,450 mg/kg
DIETHYLTOLUENEDIAMINE	Dermal	Rat	LD50 > 2,000 mg/kg
DIETHYLTOLUENEDIAMINE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.61 mg/l
DIETHYLTOLUENEDIAMINE	Ingestion	Rat	LD50 472 mg/kg
POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-HYDRO-.OMEGA.-HYDROXY-	Dermal	Rabbit	LD50 > 10,000 mg/kg
POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-HYDRO-.OMEGA.-HYDROXY-	Ingestion	Rat	LD50 > 2,000 mg/kg
SYNTHETIC AMORPHOUS SILICA, FUMED,	Dermal	Rabbit	LD50 > 5,000 mg/kg

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CRYSTALLINE FREE			
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Rat	LD50 > 5,110 mg/kg
DIISONONYL PHTHALATE	Dermal	Rabbit	LD50 > 3,160 mg/kg
DIISONONYL PHTHALATE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
DIISONONYL PHTHALATE	Ingestion	Rat	LD50 > 10,000 mg/kg
POLYETHYLENE GLYCOL	Dermal	Rabbit	LD50 > 20,000 mg/kg
POLYETHYLENE GLYCOL	Ingestion	Rat	LD50 32,770 mg/kg
CARBON BLACK	Dermal	Rabbit	LD50 > 3,000 mg/kg
CARBON BLACK	Ingestion	Rat	LD50 > 8,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Rabbit	No significant irritation
CALCIUM CARBONATE	Rabbit	No significant irritation
DIETHYLTOLUENEDIAMINE	Rabbit	No significant irritation
POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-HYDRO.-OMEGA.-HYDROXY-	Rabbit	No significant irritation
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Rabbit	No significant irritation
DIISONONYL PHTHALATE	Rabbit	No significant irritation
POLYETHYLENE GLYCOL	Rabbit	Minimal irritation
CARBON BLACK	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Overall product		Moderate irritant
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Rabbit	Mild irritant
CALCIUM CARBONATE	Rabbit	No significant irritation
DIETHYLTOLUENEDIAMINE	Rabbit	Severe irritant
POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-HYDRO.-OMEGA.-HYDROXY-	Rabbit	No significant irritation
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Rabbit	No significant irritation
DIISONONYL PHTHALATE	Rabbit	Mild irritant
POLYETHYLENE GLYCOL	Rabbit	Mild irritant
CARBON BLACK	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
DIETHYLTOLUENEDIAMINE	Human	Some positive data exist, but the data are not sufficient for classification
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Human and animal	Not sensitizing
DIISONONYL PHTHALATE	Human and animal	Not sensitizing
POLYETHYLENE GLYCOL	Guinea pig	Not sensitizing

**Respiratory Sensitization**

Name	Species	Value

**Germ Cell Mutagenicity**

Name	Route	Value
DIETHYLTOLUENEDIAMINE	In Vitro	Some positive data exist, but the data are not sufficient for classification
DIETHYLTOLUENEDIAMINE	In vivo	Some positive data exist, but the data are not sufficient for classification

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SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	In Vitro	Not mutagenic
DIISONONYL PHTHALATE	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL	In vivo	Not mutagenic
CARBON BLACK	In Vitro	Not mutagenic
CARBON BLACK	In vivo	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
DIETHYLTOLUENEDIAMINE	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
DIISONONYL PHTHALATE	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
POLYETHYLENE GLYCOL	Ingestion	Rat	Not carcinogenic
CARBON BLACK	Dermal	Mouse	Not carcinogenic
CARBON BLACK	Ingestion	Mouse	Not carcinogenic
CARBON BLACK	Inhalation	Rat	Carcinogenic

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
CALCIUM CARBONATE	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premat ing & during gestation
DIETHYLTOLUENEDIAMINE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 3.5 mg/kg/day	24 months
DIETHYLTOLUENEDIAMINE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 2.8 mg/kg/day	24 months
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
DIISONONYL PHTHALATE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
DIISONONYL PHTHALATE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
DIISONONYL PHTHALATE	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
POLYETHYLENE GLYCOL	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,125 mg/kg/day	during gestation
POLYETHYLENE GLYCOL	Ingestion	Not toxic to male reproduction	Rat	NOAEL 5699 +/- 1341 mg/kg/day	5 days
POLYETHYLENE GLYCOL	Not Specified	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL N/A	
POLYETHYLENE GLYCOL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 562 mg/animal/day	during gestation

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

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Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CALCIUM CARBONATE	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
POLYETHYLENE GLYCOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.008 mg/l	2 weeks

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CALCIUM CARBONATE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
DIETHYLTOLUENEDIA MINE	Ingestion	liver	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/kg/day	24 months
DIETHYLTOLUENEDIA MINE	Ingestion	endocrine system	May cause damage to organs through prolonged or repeated exposure	Rat	NOAEL 1.4 mg/kg/day	24 months
DIETHYLTOLUENEDIA MINE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.8 mg/kg/day	24 months
DIETHYLTOLUENEDIA MINE	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.4 mg/kg/day	24 months
DIETHYLTOLUENEDIA MINE	Ingestion	heart   skin   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles   nervous system   respiratory system	All data are negative	Rat	NOAEL 3.5 mg/kg/day	24 months
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
DIISONONYL PHTHALATE	Dermal	blood   liver   kidney and/or bladder	All data are negative	Rabbit	NOAEL 2,425 mg/kg/day	6 weeks
DIISONONYL PHTHALATE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL not available	13 weeks
POLYETHYLENE GLYCOL	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.008 mg/l	2 weeks
POLYETHYLENE GLYCOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 5,640 mg/kg/day	13 weeks
POLYETHYLENE GLYCOL	Ingestion	heart   endocrine system   hematopoietic system   liver   nervous system	All data are negative	Rat	NOAEL 5,640 mg/kg/day	13 weeks
CARBON BLACK	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

Name	Value
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Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): Not regulated

**SECTION 14: Transport Information**

For Transport Information, please call +44(0)1531 636300

**SECTION 15: Regulatory information**

**15.1. US Federal Regulations**

Contact UPS for more information.

**311/312 Hazard Categories:**

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

**This material contains a chemical which requires export notification under TSCA Section 12[b]:**

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Regulation</u>	<u>Status</u>
DIETHYL TOLUENEDIAMINE (Benzenediamine, ar,ar-diethyl-ar-methyl-)	68479-98-1	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable
DIETHYL TOLUENEDIAMINE	68479-98-1	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable

**15.2. State Regulations**

Contact UPS for more information.

**15.3. Chemical Inventories**

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact UPS for more information.

#### 15.4. International Regulations

Contact UPS for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### SECTION 16: Other information

#### NFPA Hazard Classification

**Health: 1 Flammability: 1 Instability: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response 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.

#### HMIS Hazard Classification

**Health: \*2 Flammability: 1 Physical Hazard: 0 Personal Protection: X - See PPE section.**

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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### SECTION 1: Identification

#### 1.1. Product identifier

UPS TAC 075 URETHANE ELASTOMER PRIMER

#### Product Identification Numbers

UPS TAC 075

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Coating, Primer for Urethane elastomers.

##### Supplier's details

**MANUFACTURER:** UNIQUE POLYMER SYSTEMS LTD, UNIT 1 BANKSIDE INDUSTRIAL ESTATE, LITTLE MARCLE ROAD, LEDBURY, HEREFORDSHIRE, HR8 2DR, UNITED KINGDOM

**Telephone:** +44(0) 1531 636300

##### Emergency telephone number

+44(0) 1531 636300

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Flammable Liquid: Category 2.

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (central nervous system): Category 3.

Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Flame | Exclamation mark | Health Hazard |

**Pictograms**



**Hazard Statements**

Highly flammable liquid and vapor.

Causes serious eye irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure:  
respiratory system |

**Precautionary Statements**

**Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

**Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Call a POISON CENTER or doctor/physician if you feel unwell.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**Storage:**

Store in a well-ventilated place. Keep cool.

Keep container tightly closed.

Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**2.3. Hazards not otherwise classified**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

25% of the mixture consists of ingredients of unknown acute inhalation toxicity.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
METHYL ETHYL KETONE	78-93-3	70 - 80 Trade Secret *
NON-HAZARDOUS MATERIALS	Mixture	15 - 30
DIPHENYLMETHANE-2,4'-DIISOCYANATE	5873-54-1	1 - 5 Trade Secret *
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	101-68-8	1 - 5 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

**Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

**SECTION 5: Fire-fighting measures**

**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**5.2. Special hazards arising from the substance or mixture**

Closed containers exposed to heat from fire may build pressure and explode.

**Hazardous Decomposition or By-Products**

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

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Hydrogen Cyanide  
Oxides of Nitrogen

During Combustion  
During Combustion

### 5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

### 6.3. Methods and material for containment and cleaning up

Contain spill. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Place in a metal container approved for transportation by appropriate authorities. 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 SDS. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial or professional use only. Do not use in a confined area with minimal air exchange. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from acids. Store away from oxidizing agents.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available

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for the component.

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	101-68-8	ACGIH	TWA:0.005 ppm	
FREE ISOCYANATES	101-68-8	Manufacturer determined	TWA:0.005 ppm;STEL:0.02 ppm	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	101-68-8	OSHA	CEIL:0.2 mg/m3(0.02 ppm)	
FREE ISOCYANATES	5873-54-1	Manufacturer determined	TWA:0.005 ppm;STEL:0.02 ppm	
METHYL ETHYL KETONE	78-93-3	OSHA	TWA:590 mg/m3(200 ppm)	
METHYL ETHYL KETONE	78-93-3	ACGIH	TWA:200 ppm;STEL:300 ppm	

ACGIH : American Conference of Governmental Industrial Hygienists  
 AIHA : American Industrial Hygiene Association  
 CMRG : Chemical Manufacturer's Recommended Guidelines  
 OSHA : United States Department of Labor - Occupational Safety and Health Administration  
 TWA: Time-Weighted-Average  
 STEL: Short Term Exposure Limit  
 CEIL: Ceiling

**8.2. Exposure controls**

**8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:  
 Indirect Vented Goggles

**Skin/hand protection**

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Butyl Rubber  
 Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Butyl rubber  
 Apron - polymer laminate

**Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:  
 Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Liquid
<b>Specific Physical Form:</b>	Liquid
<b>Odor, Color, Grade:</b>	Pungent Solvent odor; Clear Amber color
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	>=80 °C
<b>Flash Point</b>	-7 °C [ <i>Test Method: Closed Cup</i> ]
<b>Evaporation rate</b>	2.7 [ <i>Ref Std: BUOAC=1</i> ]
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	1.8 % volume
<b>Flammable Limits(UEL)</b>	11.5 % volume
<b>Vapor Pressure</b>	78 mmHg [ <i>@ 20 °C</i> ]
<b>Vapor Density</b>	2.5 [ <i>Ref Std: AIR=1</i> ]
<b>Density</b>	.870 g/ml
<b>Specific Gravity</b>	0.870 [ <i>Ref Std: WATER=1</i> ]
<b>Solubility in Water</b>	Negligible
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	515 °C
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	< 1 centipoise
<b>Volatile Organic Compounds</b>	652.5 g/l
<b>Percent volatile</b>	75 % weight

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat  
Sparks and/or flames  
Temperatures above the boiling point

### 10.5. Incompatible materials

Alcohols  
Combustibles  
Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.  
Strong acids

Strong oxidizing agents

#### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

### SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

#### 11.1. Information on Toxicological effects

##### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### **Inhalation:**

May be harmful if inhaled.

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

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause additional health effects (see below).

##### **Skin Contact:**

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

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

##### **Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

##### **Ingestion:**

May be harmful if swallowed.

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

##### **Additional Health Effects:**

##### **Single exposure may cause 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 target organ effects:**

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

##### **Additional Information:**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.



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**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE 20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
METHYL ETHYL KETONE	Dermal	Rabbit	LD50 > 8,050 mg/kg
METHYL ETHYL KETONE	Inhalation-Vapor (4 hours)	Rat	LC50 34.5 mg/l
METHYL ETHYL KETONE	Ingestion	Rat	LD50 2,737 mg/kg
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Inhalation-Vapor		LC50 estimated to be 10 - 20 mg/l
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Inhalation-Vapor		LC50 estimated to be 10 - 20 mg/l
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Dermal	Rabbit	LD50 > 5,000 mg/kg
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Dermal	Rabbit	LD50 > 5,000 mg/kg
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.369 mg/l
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Ingestion	Rat	LD50 31,600 mg/kg
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.369 mg/l
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Ingestion	Rat	LD50 31,600 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
METHYL ETHYL KETONE	Rabbit	Minimal irritation
DIPHENYLMETHANE-2,4'-DIISOCYANATE	official classification	Irritant
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	official classification	Irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
METHYL ETHYL KETONE	Rabbit	Severe irritant
DIPHENYLMETHANE-2,4'-DIISOCYANATE	official classification	Severe irritant
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	official classification	Severe irritant

**Skin Sensitization**

Name	Species	Value
DIPHENYLMETHANE-2,4'-DIISOCYANATE	official classification	Sensitizing
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	official classification	Sensitizing

**Respiratory Sensitization**

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Name	Species	Value
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Human	Sensitizing
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Human	Sensitizing

**Germ Cell Mutagenicity**

Name	Route	Value
METHYL ETHYL KETONE	In Vitro	Not mutagenic
DIPHENYLMETHANE-2,4'-DIISOCYANATE	In Vitro	Some positive data exist, but the data are not sufficient for classification
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
METHYL ETHYL KETONE	Inhalation	Human	Not carcinogenic
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
METHYL ETHYL KETONE	Inhalation	Not toxic to female reproduction	Rat	NOAEL 14.7 mg/l	90 days
METHYL ETHYL KETONE	Inhalation	Not toxic to male reproduction	Rat	NOAEL 14.7 mg/l	90 days
METHYL ETHYL KETONE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	LOAEL 8.8 mg/l	during gestation
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.004 mg/l	during organogenesis
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.004 mg/l	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
METHYL ETHYL KETONE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classification	NOAEL Not available	
METHYL ETHYL KETONE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
METHYL ETHYL KETONE	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	not applicable
METHYL ETHYL KETONE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,080 mg/kg	not applicable
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

**UPS TAC 075 URETHANE ELASTOMER PRIMER****Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
METHYL ETHYL KETONE	Dermal	nervous system	All data are negative	Guinea pig	NOAEL Not available	31 weeks
METHYL ETHYL KETONE	Inhalation	liver   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 14.7 mg/l	90 days
METHYL ETHYL KETONE	Inhalation	heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles	All data are negative	Rat	NOAEL 14.7 mg/l	90 days
METHYL ETHYL KETONE	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	7 days
METHYL ETHYL KETONE	Ingestion	nervous system	All data are negative	Rat	NOAEL 173 mg/kg/day	90 days
DIPHENYLMETHANE-2,4'-DIISOCYANATE	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks

**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D035 (Methyl ethyl ketone)

**SECTION 14: Transport Information**

For Transport Information, please call +44(0) 1531 636300

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact UPS for more information.

#### 311/312 Hazard Categories:

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

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

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	101-68-8	1- 5
P,P'-METHYLENEBIS(PHENYL ISOCYANATE) (DIISOCYANATES (CERTAIN CHEMICALS ONLY))	101-68-8	1- 5

### 15.2. State Regulations

Contact UPS for more information.

### 15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact UPS for more information.

### 15.4. International Regulations

Contact UPS for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: Other information

#### NFPA Hazard Classification

Health: 2 Flammability: 3 Instability: 1 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response 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.

#### HMIS Hazard Classification

**Health:** \*2 **Flammability:** 3 **Physical Hazard:** 1 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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