

## SAFETY DATA SHEET

### POLYURETHANE RESIN UR5041

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

**Product name** POLYURETHANE RESIN UR5041

**Product number** UR5041A, EUR5041A, EUR5041AB200K, EUR5041AB5K, EUR5041K1K, EUR5041K20K, EUR5041K25K, EUR5041K5K, EUR5041RP250G, EUR5041RP250GE, ZE

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Resin.

**Uses advised against** At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** ELECTROLUBE. A division of HK WENTWORTH LTD  
 ASHBY PARK, COALFIELD WAY,  
 ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR  
 UNITED KINGDOM  
 info@hkw.co.uk  
 +44 (0)1530 419600  
 +44 (0)1530 416640

##### 1.4. Emergency telephone number

**Emergency telephone**

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification

**Physical hazards** Not Classified

**Health hazards** Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335

**Environmental hazards** Not Classified

**Classification (67/548/EEC or 1999/45/EC)** Xi; R37/38, R41.

##### 2.2. Label elements

###### Pictogram



**Signal word** Danger

**Hazard statements** H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H335 May cause respiratory irritation.

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<b>Precautionary statements</b>	P280 Wear protective gloves, eye and face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Contains</b>	CALCIUM CARBONATE, ETHOEXADIOL
<b>Supplementary precautionary statements</b>	P261 Avoid breathing vapour/spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER/doctor. P312 Call a POISON CENTER/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container to ...

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria. The above phrases are the risks associated with the product

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>CALCIUM CARBONATE</b>	<b>10-30%</b>
CAS number: 1317-65-3	EC number: 215-279-6
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Skin Irrit. 2 - H315	Xi;R36/37/38.
Eye Irrit. 2 - H319	
STOT SE 3 - H335	
<b>ETHOEXADIOL</b>	<b>10-30%</b>
CAS number: 94-96-2	EC number: 202-377-9
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Eye Dam. 1 - H318	Xi;R41
<b>1,3-BUTADIENE</b>	<b>&lt;1%</b>
CAS number: 106-99-0	EC number: 203-450-8
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Flam. Gas 1 - H220	F+;R12 Carc. Cat. 1;R45 Muta. Cat. 2;R46
Press. Gas	
Muta. 1B - H340	
Carc. 1A - H350	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

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**Composition comments**      Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues. Treat symptomatically.
<b>Inhalation</b>	Move affected person to fresh air at once. Keep affected person warm and at rest. Get medical attention immediately.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately.
<b>Skin contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

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

**Notes for the doctor**      Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media**      Extinguish with the following media: Water spray, fog or mist. Foam. Powder.

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

<b>Specific hazards</b>	Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> . Oxides of carbon. Oxides of nitrogen. No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	No specific firefighting precautions known.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

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

**Personal precautions**      Wear protective clothing as described in Section 8 of this safety data sheet.

#### 6.2. Environmental precautions

**Environmental precautions**      Do not discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up**      Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers.

#### 6.4. Reference to other sections

# POLYURETHANE RESIN UR5041

**Reference to other sections**    Wear protective clothing as described in Section 8 of this safety data sheet.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions**            Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Persons susceptible to allergic reactions should not handle this product.

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

**Storage precautions**        Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

### 7.3. Specific end use(s)

**Specific end use(s)**        The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### 1,3-BUTADIENE

Long-term exposure limit (8-hour TWA): WEL 10 ppm 22 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

**Ingredient comments**        No exposure limits known for ingredient(s).

#### CHINA CLAY (CAS: 1332-58-7)

**Ingredient comments**        OSHA PEL= 15 mg/m<sup>3</sup> TOTAL DUST

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. EN166

#### Hand protection

Wear protective gloves made of the following material: Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Gloves should conform to EN374

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

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<b>Hygiene measures</b>	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
<b>Respiratory protection</b>	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. It is recommended to use respiratory equipment with combination filter, type A2/P2. EN14387 When spraying, wear a suitable supplied-air respirator.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Viscous liquid.
<b>Colour</b>	Black.
<b>Odour</b>	Aromatic.
<b>Viscosity</b>	@ °C

#### 9.2. Other information

<b>Other information</b>	None.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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#### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
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#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Not available. Will not polymerise.
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#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
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#### 10.5. Incompatible materials

<b>Materials to avoid</b>	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
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#### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Heating may generate the following products: Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO).
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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<b>Toxicological effects</b>	No information available.
<b>Other health effects</b>	There is no evidence that the product can cause cancer.
<b>Ingestion</b>	May cause stomach pain or vomiting.

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<b>Skin contact</b>	Irritating to skin. May cause skin irritation/eczema.
<b>Eye contact</b>	Irritating to eyes.
<b>Acute and chronic health hazards</b>	No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain individuals with pre-existing or latent health problems.

### SECTION 12: Ecological Information

**Ecotoxicity** Not regarded as dangerous for the environment.

#### 12.1. Toxicity

#### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

#### 12.4. Mobility in soil

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**Road transport notes** Not classified.

**Rail transport notes** Not classified.

**Sea transport notes** Not classified.

**Air transport notes** Not classified.

#### 14.1. UN number

#### 14.2. UN proper shipping name

#### 14.3. Transport hazard class(es)

**Transport labels**

#### 14.4. Packing group

#### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**  
No.

#### 14.6. Special precautions for user

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

## POLYURETHANE RESIN UR5041

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**National regulations** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).  
Control of Substances Hazardous to Health Regulations 2002 (as amended).

#### Guidance

**Authorisations (Title VII Regulation 1907/2006)** No specific authorisations are known for this product.

**Restrictions (Title VIII Regulation 1907/2006)** No specific restrictions on use are known for this product.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>Issued by</b>	Toni Ashford
<b>Revision date</b>	22/09/2015
<b>Revision</b>	5
<b>SDS number</b>	10874
<b>Risk phrases in full</b>	R36/37/38 Irritating to eyes, respiratory system and skin. R37/38 Irritating to respiratory system and skin. R41 Risk of serious damage to eyes. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Hazard statements in full</b>	H220 Extremely flammable gas. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H340 May cause genetic defects. H350 May cause cancer.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## SAFETY DATA SHEET

### POLYURETHANE RESIN UR5041B

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1. Product identifier

**Product name** POLYURETHANE RESIN UR5041B  
**Product No.** UR5041B, EUR5041B, EUR5041BB5K, EUR5041K1K, EUR5041K20K, EUR5041K25K, EUR5041K5K, EUR5041RP250G, EUR5041RP250GE, ZE

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Resin.  
**Uses advised against** At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** ELECTROLUBE. A division of HK WENTWORTH LTD  
 ASHBY PARK, COALFIELD WAY,  
 ASHBY DE LA ZOUCH, LEICESTERSHIRE  
 LE65 1JR  
 UNITED KINGDOM  
 +44 (0)1530 419600  
 +44 (0)1530 416640  
 info@hkw.co.uk

##### 1.4. Emergency telephone number

+44 (0)1530 419600 between 8.30am - 5.00pm GMT Mon – Fri

#### SECTION 2: HAZARDS IDENTIFICATION

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H332; Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Resp. Sens. 1 - H334; Skin Sens. 1 - H317; Carc. 2 - H351; STOT SE 3 - H335; STOT RE 2 - H373
Environment	Not classified.

###### Classification (1999/45/EEC)

Xn; R20, R48/20. Carc. Cat. 3; R40. R42/43. Xi; R36/37/38.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

##### 2.2. Label elements

**Contains** DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

**Label In Accordance With (EC) No. 1272/2008**



**Signal Word**

Danger

**Hazard Statements**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.



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H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

## Precautionary Statements

P285	In case of inadequate ventilation wear respiratory protection.
P280	Wear protective gloves, eye and face protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313	Get medical advice/attention.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

## Supplementary Precautionary Statements

P271	Use only outdoors or in a well-ventilated area.
P260	Do not breathe vapour/spray.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.

## Supplemental label information

EUH204	Contains isocyanates. May produce an allergic reaction.
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## 2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

<b>DIPHENYLMETHANE-4,4'-DI-ISOCYANATE</b>		<b>80-100%</b>
<b>CAS-No.: 101-68-8</b>	<b>EC No.: 202-966-0</b>	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Acute Tox. 4 - H332	Carc. Cat. 3;R40	
Skin Irrit. 2 - H315	Xn;R20,R48/20	
Eye Irrit. 2 - H319	Xi;R36/37/38	
Resp. Sens. 1 - H334	R42/43	
Skin Sens. 1 - H317		
Carc. 2 - H351		
STOT SE 3 - H335		
STOT RE 2 - H373		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### Composition Comments

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels. Ingredients are registered on AICS

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### Inhalation

Move the exposed person to fresh air at once. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues. If respiratory problems, artificial respiration/oxygen. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Immediately call an ambulance.

#### Ingestion

DO NOT INDUCE VOMITING! Immediately rinse mouth and provide fresh air. Get medical attention immediately!

#### Skin contact

Remove affected person from source of contamination. Immediately remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

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## **Eye contact**

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if any discomfort continues.

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

### **Inhalation**

May cause an asthma-like shortness of breath.

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

Treat Symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

#### **Extinguishing media**

Fire can be extinguished using: Water spray, fog or mist. Foam. Powder.

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

#### **Hazardous combustion products**

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### **Unusual Fire & Explosion Hazards**

Fire causes formation of toxic gases.

#### **Specific hazards**

Fire creates: Irritating gases/vapours/fumes of: Hydrogen cyanide (HCN). Nitrous gases (NOx).

### **5.3. Advice for firefighters**

#### **Special Fire Fighting Procedures**

Avoid breathing fire vapours. Use pressurised air mask if product is involved in a fire.

#### **Protective equipment for fire-fighters**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Wear protective clothing as described in Section 8 of this safety data sheet.

### **6.2. Environmental precautions**

Do not discharge into drains, water courses or onto the ground.

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

When dealing with a spillage, please consult the section relating to suitable protective measures. Wear necessary protective equipment. Stop leak if possible without risk. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

### **6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. For waste disposal, see section 13.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Persons with impaired lung functions should not handle this preparation. Persons susceptible to allergic reactions should not handle this product. Avoid forming spray/aerosol mists. Avoid inhalation of vapours/spray and contact with skin and eyes. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of vapours. Spraying is permitted only in closed systems, spray cabinets or spray boxes with adequate ventilation. Eye wash facilities and emergency shower must be available when handling this product.

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

Keep in original container. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame.

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## 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
DIPHENYLMETHANE-4,4'-DI-ISOCYANATE	WEL		0.02 mg/m <sup>3</sup> (Sen)		0.07 mg/m <sup>3</sup> (Sen)	

WEL = Workplace Exposure Limit.

#### Ingredient Comments

No exposure limits noted for ingredient(s).

### 8.2. Exposure controls

#### Protective equipment



#### Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

#### Engineering measures

Provide sufficient ventilation during operations which cause vapour formation. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

#### Respiratory equipment

Respiratory protection must be used if air contamination exceeds acceptable level. It is recommended to use respiratory equipment with combination filter, type A2/P2. EN14387 When spraying use suitable air-supplied respirator.

#### Hand protection

Use protective gloves made of: Rubber, neoprene or PVC. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Gloves should conform to EN374

#### Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable. EN166

#### Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

#### Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

#### Environmental Exposure Controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	Viscous Liquid
Colour	Amber.
Odour	Musty (mouldy).
Solubility	Insoluble in water
Initial boiling point and boiling range (°C)	>200 (392 F)
Melting point (°C)	<15 (<59 F)
Relative density	1.23 @ 20 °C (68 F)
Vapour pressure	1300 kPa @ 25 °C (77 F)
Viscosity	500 mPas @ 25 °C (77 F)
Flash point (°C)	>200 (392 F) CC (Closed cup).
Auto Ignition Temperature (°C)	>530 (986 F)

**9.2. Other information****SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Reacts strongly with strong acids, bases, organic chemicals and certain metal combinations.

**10.2. Chemical stability**

Stable under normal temperature conditions.

**10.3. Possibility of hazardous reactions****Hazardous Polymerisation**

Will not polymerise.

**10.4. Conditions to avoid**

Avoid heat, flames and other sources of ignition. Reacts strongly with strong acids, bases, organic chemicals and certain metal combinations.

**10.5. Incompatible materials****Materials To Avoid**

Water, steam, water mixtures. Strong acids.

**10.6. Hazardous decomposition products**

High temperatures generate: Toxic gases/vapours/fumes of: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Hydrogen cyanide (HCN).

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Toxic Dose 1 - LD 50**

>2000 mg/kg (oral rat)

**Toxic Conc. - LC 50**

490 mg/l/4h (inh-rat)

**Other Health Effects**

This substance has no evidence of carcinogenic properties.

**General information**

No specific health warnings noted.

**Inhalation**

Harmful by inhalation. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. May cause sensitisation by inhalation.

**Ingestion**

May cause stomach pain or vomiting.

**Skin contact**

Irritating to skin. Prolonged or repeated exposure may cause severe irritation.

**Eye contact**

Irritating to eyes.

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity**

Not regarded as dangerous for the environment. The polymer is expected to be of low toxicity.

**12.1. Toxicity**

LC 50, 96 Hrs, Fish mg/l >1000

**Acute Toxicity - Fish**

LC0 96 hours > 1000 mg/l

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EC 50, 48 Hrs, Daphnia, mg/l >500

## Acute Toxicity - Aquatic Invertebrates

EC0 > 500 mg/l Daphnia magna

## Acute Toxicity - Aquatic Plants

EC0 72 hours 1640 mg/l Scenedesmus subspicatus

### 12.2. Persistence and degradability

#### Degradability

The product is not readily biodegradable.

### 12.3. Bioaccumulative potential

#### Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

### 12.4. Mobility in soil

### 12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

### 12.6. Other adverse effects

No information required.

## SECTION 13: DISPOSAL CONSIDERATIONS

### General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

### 13.1. Waste treatment methods

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

## SECTION 14: TRANSPORT INFORMATION

### General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### Road Transport Notes

Not Classified

### Rail Transport Notes

Not classified.

### Sea Transport Notes

Not classified.

### Air Transport Notes

Not classified.

### 14.1. UN number

### 14.2. UN proper shipping name

### 14.3. Transport hazard class(es)

#### Transport Labels

No transport warning sign required.

### 14.4. Packing group

### 14.5. Environmental hazards

#### Environmentally Hazardous Substance/Marine Pollutant

No.

### 14.6. Special precautions for user

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

**SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Statutory Instruments**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

**Guidance Notes**

Workplace Exposure Limits EH40.

**EU Legislation**

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

**Health and Environmental Listings**

None of the ingredients are listed.

**Authorisations (Title VII Regulation 1907/2006)**

No specific authorisations are noted for this product.

**Restrictions (Title VIII Regulation 1907/2006)**

No specific restrictions of use are noted for this product.

**15.2. Chemical Safety Assessment**

No chemical safety assessment has been carried out.

**SECTION 16: OTHER INFORMATION**

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**Risk Phrases In Full**

R20	Harmful by inhalation.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R42/43	May cause sensitisation by inhalation and skin contact.

**Hazard Statements In Full**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.

## Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.