

## Safety Data Sheet

prepared to UN GHS Revision 3



### 1. Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier**                      05N830B                      **Revision Date:**                      03/09/2014
- Product Name:**                      EPICON GROUT M (Base)                      **Supersedes Date:**                      New SDS
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**                      Component of multicomponent industrial coatings - Industrial use
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:**                      USL  
Kingston House  
3 Walton Road  
Pattinson North  
Washington  
Tyne & Wear  
NE38 8QA  
Regulatory / Technical Information:  
+44(0)191 416 1530  
www.usluk.com
- Datasheet Produced by:**                      Norton, Catherine - info@usluk.com
- 1.4 Emergency telephone number:**                      CHEMTREC +1 703 5273887 (Outside US)

### 2. Hazard Identification

**2.1 Classification of the substance or mixture**

Hazardous to the aquatic environment, Chronic, category 2  
Eye Irritation, category 2  
Skin Irritation, category 2  
Skin Sensitizer, category 1

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Warning

### Named Chemicals on Label

2-ethylhexyl glycidyl ether, reaction product: bisphenol-a-(epichlorhydrin) epoxy resin (number average molecularweight <= 700), phenol, polymer with formaldehyde, glycidyl ether

### HAZARD STATEMENTS

Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

### PRECAUTION PHRASES

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.

### 2.3 Other hazards

Not applicable

### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

## 3. Composition/Information On Ingredients

### 3.1 Substances

#### Hazardous Ingredients

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
25068-38-6	reaction product: bisphenol-a-(epichlorhydrin) epoxy resin (number average molecularweight <= 700)	25-50
28064-14-4	phenol, polymer with formaldehyde, glycidyl ether	25-50
2461-15-6	2-ethylhexyl glycidyl ether	10-25
64742-47-8	distillates (petroleum), hydrotreated light	1.0-2.5
67-56-1	methanol	<0.1

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
25068-38-6	GHS07-GHS09	H315-317-319-411	0
28064-14-4	GHS07-GHS09	H315-317-319-411	0
2461-15-6	GHS07	H315-317-319	0
64742-47-8	GHS08	H304	0

**Additional Information:** The text for GHS Hazard Statements shown above (if any) is given in Section 16.

## 4. First-aid Measures

### 4.1 Description of First Aid Measures

**AFTER INHALATION:** Move to fresh air. Give oxygen or artificial respiration if needed. Consult a physician after significant exposure. Remove person to fresh air. If signs/symptoms continue, get medical attention.

**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**AFTER EYE CONTACT:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

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

Irritating to eyes and skin. May be harmful if swallowed. May cause long-term adverse effects in the aquatic environment.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## 5. Fire-fighting Measures

### 5.1 Extinguishing Media:

Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

**FOR SAFETY REASONS NOT TO BE USED:** Alcohol, Alcohol based solutions, any other media not listed above.

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

No Information

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Water spray Dry powder Alcohol-resistant foam Carbon dioxide (CO<sub>2</sub>) High volume water jet. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Contains epoxy constituents. See information supplied by the manufacturer.

## 6. Accidental Release Measures

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

Ensure adequate ventilation. Use personal protective equipment.

### 6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

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

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

### 6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

**INSTRUCTIONS FOR SAFE HANDLING:** Keep containers dry and tightly closed to avoid moisture absorption and contamination. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not

breathe vapours or spray mist. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection.

**PROTECTION AND HYGIENE MEASURES:** Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

## 7.2 Conditions for safe storage, including any incompatibilities

**CONDITIONS TO AVOID:** Direct sources of heat.

**STORAGE CONDITIONS:** Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

## 7.3 Specific end use(s)

No specific advice for end use available.

# 8. Exposure Controls/Personal Protection

## 8.1 Control parameters

### Ingredients with Occupational Exposure Limits (UK WELS)

Name	%	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3	OEL Note
reaction product: bisphenol-a-(epichlorhydrin)	25-50					
epoxy resin (number average molecularweight <= 700)						
phenol, polymer with formaldehyde, glycidyl ether	25-50					
2-ethylhexyl glycidyl ether	10-25					
distillates (petroleum), hydrotreated light	1.0-2.5					
methanol	<0.1	200	250	333	266	

**FURTHER INFORMATION:** Refer to the regulatory exposure limits for the workforce enforced in each country.

## 8.2 Exposure controls

### Personal Protection

**RESPIRATORY PROTECTION:** Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

**EYE PROTECTION:** Tightly fitting safety goggles. Safety glasses with side-shields

**HAND PROTECTION:** Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Rubber or plastic apron.

**OTHER PROTECTIVE EQUIPMENT:** No Information

# 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Appearance:	Clear Liquid
Physical State	Liquid
Odor	Mild
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	200 - N.D.
Flash Point, (°C)	100

<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not determined
<b>Upper/lower flammability or explosive limits</b>	10 - 20
<b>Vapour Pressure, mmHg</b>	Not determined
<b>Vapour density</b>	Not determined
<b>Relative density</b>	Not determined
<b>Solubility in / Miscibility with water</b>	Not Determined
<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature (°C)</b>	Not determined
<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	Not determined
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined

## 9.2 Other information

<b>VOC Content g/l:</b>	0
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	1.150

## 10. Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

### 10.4 Conditions to avoid

Direct sources of heat.

### 10.5 Incompatible materials

Strong oxidizing agents. Acids and bases Amines

### 10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Oral LD50:

Inhalation LC50:

**Irritation:** No information available.

**Corrosivity:** No information available.

**Sensitization:** No information available.

**Repeated dose toxicity:** No information available.

**Carcinogenicity:** No information available.

**Mutagenicity:** No information available.

**Toxicity for reproduction:** No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.  
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
25068-38-6	reaction product: bisphenol-a-(epichlorhydrin) epoxy resin (number average molecularweight <= 700)	5000 mg/kg rat, oral	5000	
28064-14-4	phenol, polymer with formaldehyde, glycidyl ether	5000 mg/kg. oral, rat	>2000 mg/kg, rabbit	
2461-15-6	2-ethylhexyl glycidyl ether	7800 mg/kg, rat	>2000 mg/kg, rabbit	
67-56-1	methanol	2080 mg/kg rat oral		

#### Additional Information:

No Information

## 12. Ecological Information

### 12.1 Toxicity:

EC50 48hr (Daphnia): No information

IC50 72hr (Algae): No information

LC50 96hr (fish): No information

**12.2 Persistence and degradability:** No information

**12.3 Bioaccumulative potential:** No information

**12.4 Mobility in soil:** No information

**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**12.6 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
25068-38-6	reaction product: bisphenol-a-(epichlorhydrin) epoxy resin (number average molecularweight <= 700)	No information	No information	
28064-14-4	phenol, polymer with formaldehyde, glycidyl ether	No information	No information	
2461-15-6	2-ethylhexyl glycidyl ether	No information	No information	
64742-47-8	distillates (petroleum), hydrotreated light	No information	No information	
67-56-1	methanol	No information	No information	

### 13. Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport Information

<b>14.1 UN number</b>	3082
<b>14.2 UN proper shipping name</b>	Environmentally hazardous substance, liquid, NO.S. (contains epoxy resin)
<b>Technical name</b>	
<b>14.3 Transport hazard class(es)</b>	9
<b>Subsidiary shipping hazard</b>	
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazards</b>	
<b>14.6 Special precautions for user</b>	Not applicable
<b>EmS-No.:</b>	F-A, S-F
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</b>	Not applicable

### 15. Regulatory Information

**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:**

**National Regulations:**

**Denmark Product Registration Number:**

**Danish MAL Code:**

**Sweden Product Registration Number:**

**Norway Product Registration Number:**

**WGK Class:**

**15.2 Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

### 16. Other Information

**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H411	Toxic to aquatic life with long lasting effects.

**Reasons for revision**

This is a new Safety Data Sheet (SDS).

**List of References:**

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark  
 ESIS (The European Chemical Substances Information System), provided by the European Commission  
 Joint Research Centre in Ispra, Italy  
 Annex VI of the EU Council Directive 67/548/EEC  
 Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC  
 European Union (EU) Regulation No. 1272/2008 on the classification, labelling and packaging of  
 substances and mixtures (CLP Regulation)  
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

**Acronym & Abbreviation Key:**

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m <sup>3</sup>	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association



MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as  
modified by the Protocol of 1978  
IBC International Bulk Container

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

No Information

## Safety Data Sheet

prepared to UN GHS Revision 3



### 1. Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier** 05N830A **Revision Date:** 03/09/2014  
**Product Name:** EPICON GROUT M (Aggregate) **Supersedes Date:** New SDS
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** USL  
Kingston House  
3 Walton Road  
Pattinson North  
Washington  
Tyne & Wear  
NE38 8QA  
Regulatory / Technical Information:  
+44(0)191 416 1530  
www.usluk.com
- Datasheet Produced by:** Norton, Catherine - info@usluk.com
- 1.4 Emergency telephone number:** CHEMTREC +1 703 5273887 (Outside US)

### 2. Hazard Identification

#### 2.1 Classification of the substance or mixture

Serious Eye Damage, category 1  
Skin Irritation, category 2  
Skin Sensitizer, category 1

#### 2.2 Label elements

##### Symbol(s) of Product



##### Signal Word

Danger

##### Named Chemicals on Label

cement, portland, chemicals

**HAZARD STATEMENTS**

Serious Eye Damage, category 1	H318	Causes serious eye damage.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

**PRECAUTION PHRASES**

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.

**2.3 Other hazards**

Not applicable

**Results of PBT and vPvB assessment:**

The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

**3. Composition/Information On Ingredients****3.1 Substances****Hazardous Ingredients**

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
65997-15-1	cement, portland, chemicals	25-50

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
65997-15-1	GHS05-GHS07	H315-317-318	0

**Additional Information:** The text for GHS Hazard Statements shown above (if any) is given in Section 16.**4. First-aid Measures****4.1 Description of First Aid Measures**

**AFTER INHALATION:** Move to fresh air. Give oxygen or artificial respiration if needed. Consult a physician after significant exposure. Provide fresh air, rest and warmth. Call a physician immediately. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position.

**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off with warm water and soap. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists. Do not use solvent or thinners to clean skin.

**AFTER EYE CONTACT:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs. Provide fresh air, rest and warmth. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

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

No Information

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if

available, can be found in section 11. When symptoms persist or in all cases of doubt seek medical advice. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting Measures

### 5.1 Extinguishing Media:

Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

**FOR SAFETY REASONS NOT TO BE USED:** Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

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

Heating or fire conditions liberates toxic gas. Flash back possible over considerable distance. As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Vapours may form explosive mixtures with air. Solvent vapours are heavier than air and may spread along floors and ignite.

### 5.3 Advice for firefighters

None known. The product itself does not burn. In the event of fire, wear self-contained breathing apparatus. Water/Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Keep containers and surroundings cool with water spray.

## 6. Accidental Release Measures

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

Ensure adequate ventilation. Avoid dust formation. Use personal protective equipment. Remove all sources of ignition.

### 6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

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

Pick up and arrange disposal without creating dust. Pick up and transfer to properly labelled containers. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). After cleaning, flush away traces with water.

### 6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

**INSTRUCTIONS FOR SAFE HANDLING:** Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Take measures to prevent the build up of electrostatic charge. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically; always use earthing leads when transferring from one container to another. Use only in area provided with appropriate exhaust ventilation. Provide sufficient air exchange and/or exhaust in work rooms. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Do not breathe vapours/dust. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Avoid contact with skin and eyes. Protect from moisture. Wash thoroughly after handling. Do not taste or swallow.

**PROTECTION AND HYGIENE MEASURES:** Wash hands before breaks and at the end of workday. Do not breathe dust. When using, do not eat, drink or smoke.

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

**CONDITIONS TO AVOID:** Exposure to moisture. Avoid moisture. Avoid heat, sparks, flames and other ignition sources.

**STORAGE CONDITIONS:** Store in original container. Keep tightly closed in a dry and cool place. Keep in a dry place. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store away from: oxidising materials, acids, and alkalis. Store in upright position only. Storage of flammable liquids.

### 7.3 Specific end use(s)

No specific advice for end use available.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Ingredients with Occupational Exposure Limits (UK WELS)

<u>Name</u>	<u>%</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>	<u>OEL Note</u>
cement, portland, chemicals	25-50				10	

**FURTHER INFORMATION:** Refer to the regulatory exposure limits for the workforce enforced in each country.

### 8.2 Exposure controls

#### Personal Protection

**RESPIRATORY PROTECTION:** Dust safety masks are recommended when the dust concentration is more than 10 mg/m3. Effective dust mask. Use compressed air or fresh air breathing apparatus in closed compartments. Wear respiratory protection with combination filter (dust and gas filter, EN 141) during spraying operations: Gas filter type A1 (organic substances). Dust filter P3 (for fine dust). Ensure adequate ventilation, especially in confined areas.

**EYE PROTECTION:** Tightly fitting safety goggles. Safety glasses with side-shields If splashes are likely to occur, wear: Face-shield, tightly fitting safety goggles.

**HAND PROTECTION:** Protective gloves Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Protective gloves complying with EN 374: PVA. Viton®. Protective gloves complying with EN 374: PVA. Nitrile rubber. Use chemical resistant gloves and lotions and barrier creams to prevent drying of the skin.

**OTHER PROTECTIVE EQUIPMENT:** Ensure that eyewash stations and safety showers are close to the workstation location.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Dark Grey Fine Aggregate
Physical State	Solid
Odor	None
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	100 - N.D.
Flash Point, (°C)	400
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	20 - 30
Vapour Pressure, mmHg	Not determined
Vapour density	Not determined
Relative density	Not determined
Solubility in / Miscibility with water	Not Determined
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined

<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	Not determined
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined

**9.2 Other information**

<b>VOC Content g/l:</b>	0
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	2.650

## 10. Stability and Reactivity

**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

**10.2 Chemical stability**

Stable under recommended storage conditions. Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**10.4 Conditions to avoid**

Exposure to moisture. Avoid moisture. Avoid heat, sparks, flames and other ignition sources.

**10.5 Incompatible materials**

Do not store near acids. Keep away from oxidising agents and strongly acid or alkaline materials. Acids Strong oxidizing agents. Avoid contact with acids, alkalis, and strong oxidising agents.

**10.6 Hazardous decomposition products**

No hazardous decomposition products are known. Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>)

## 11. Toxicological Information

**11.1 Information on toxicological effects****Acute Toxicity:**

**Oral LD50:**

**Inhalation LC50:**

**Irritation:** No information available.

**Corrosivity:** No information available.

**Sensitization:** No information available.

**Repeated dose toxicity:** No information available.

**Carcinogenicity:** No information available.

**Mutagenicity:** No information available.

**Toxicity for reproduction:** No information available.

If no information is available above under **Acute Toxicity** then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
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Data at the substance level is not available.

**Additional Information:**

This product may contain Ethyl Benzene, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Respiration of solvent vapour may cause dizziness. Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

## 12. Ecological Information

**12.1 Toxicity:**

<b>EC50 48hr (Daphnia):</b>	No information
<b>IC50 72hr (Algae):</b>	No information
<b>LC50 96hr (fish):</b>	No information

**12.2 Persistence and degradability:** No information

**12.3 Bioaccumulative potential:** No information

**12.4 Mobility in soil:** No information

**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**12.6 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
65997-15-1	cement, portland, chemicals	No information	No information	

## 13. Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** In accordance with local and national regulations. Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

## 14. Transport Information

- 14.1 UN number
- 14.2 UN proper shipping name Not regulated for transport according to ADR/RID, IMDG, and IATA regulations.
- Technical name
- 14.3 Transport hazard class(es)  
Subsidiary shipping hazard
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user Not applicable  
EmS-No.:
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code Not applicable

## 15. Regulatory Information

- 15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

**National Regulations:**

Denmark Product Registration Number:

Danish MAL Code:

Sweden Product Registration Number:

Norway Product Registration Number:

WGK Class:

- 15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## 16. Other Information

**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

**Reasons for revision**

This is a new Safety Data Sheet (SDS).

**List of References:**

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark  
 ESIS (The European Chemical Substances Information System), provided by the European Commission  
 Joint Research Centre in Ispra, Italy  
 Annex VI of the EU Council Directive 67/548/EEC  
 Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC  
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of  
 substances and mixtures (CLP Regulation)  
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"



## Acronym &amp; Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

No Information

**Safety Data Sheet**  
prepared to UN GHS Revision 3



## 1. Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier** 05N830H **Revision Date:** 03/09/2014  
**Product Name:** EPICON GROUT M (Hardener) **Supersedes Date:** New SDS
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** USL  
Kingston House  
3 Walton Road  
Pattinson North  
Washington  
Tyne & Wear  
NE38 8QA  
Regulatory / Technical Information:  
+44(0)191 416 1530  
www.usluk.com
- Datasheet Produced by:** Norton, Catherine - info@usluk.com
- 1.4 Emergency telephone number:** CHEMTREC +1 703 5273887 (Outside US)

## 2. Hazard Identification

### 2.1 Classification of the substance or mixture

Acute Toxicity, Oral, category 4  
Acute Toxicity, Dermal, category 4  
Acute Toxicity, Inhalation, category 4  
Serious Eye Damage, category 1  
Reproductive Toxicity, category 2  
Skin Corrosion, category 1  
Skin Sensitizer, category 1

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Danger

### Named Chemicals on Label

4,4'-isopropylidenediphenol, benzyl alcohol, diethylenetriamine

### HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Acute Toxicity, Dermal, category 4	H312	Harmful in contact with skin.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Serious Eye Damage, category 1	H318	Causes serious eye damage.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

### PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P281	Use personal protective equipment as required.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302	IF ON SKIN:
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P352	Wash with plenty of soap and water.

## 2.3 Other hazards

Not applicable

### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

## 3. Composition/Information On Ingredients

### 3.1 Substances

#### Hazardous Ingredients

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
111-40-0	diethylenetriamine	50-75

100-51-6	benzyl alcohol	25-50
80-05-7	4,4'-isopropylidenediphenol	10-25

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
111-40-0	GHS05-GHS06	H302-312-314-317-318-331	0
100-51-6	GHS07	H302-319-332	0
80-05-7	GHS05-GHS07-GHS08	H317-318-335-361F	0

**Additional Information:** The text for GHS Hazard Statements shown above (if any) is given in Section 16.

## 4. First-aid Measures

### 4.1 Description of First Aid Measures

**AFTER INHALATION:** Move to fresh air. Give oxygen or artificial respiration if needed. Call a physician or poison control centre immediately. Remove person to fresh air. If signs/symptoms continue, get medical attention.

**AFTER SKIN CONTACT:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Flush skin with large amounts of water. If irritation develops and persists, get medical attention.

**AFTER EYE CONTACT:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contact lenses.

**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

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

Causes burns. Harmful in contact with skin and if swallowed. May be harmful if swallowed. Corrosive after repeated contact with skin and mucous membranes.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## 5. Fire-fighting Measures

### 5.1 Extinguishing Media:

Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

**FOR SAFETY REASONS NOT TO BE USED:** Alcohol, Alcohol based solutions, any other media not listed above.

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

No Information

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Water sprayDry powderAlcohol-resistant foamCarbon dioxide (CO2)High volume water jet.

## 6. Accidental Release Measures

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

Ensure adequate ventilation. Use personal protective equipment.

### 6.2 Environmental precautions

Should not be released into the environment.

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

Pick up and transfer to properly labelled containers. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

### 6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

**INSTRUCTIONS FOR SAFE HANDLING:** Keep containers dry and tightly closed to avoid moisture absorption and contamination. Wear personal protective equipment. Do not breathe vapours or spray mist. Wash thoroughly after handling. Avoid contact with skin and clothing. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection.

**PROTECTION AND HYGIENE MEASURES:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Avoid contact with the skin and the eyes. Wash hands before eating, drinking, or smoking.

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

**CONDITIONS TO AVOID:** Direct sources of heat.

**STORAGE CONDITIONS:** Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a cool, well-ventilated place. Keep in a dry, cool and well-ventilated place.

### 7.3 Specific end use(s)

No specific advice for end use available.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Ingredients with Occupational Exposure Limits (UK WELS)

Name	%	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>	<u>OEL Note</u>
diethylenetriamine	50-75	1			4.3	
benzyl alcohol	25-50					
4,4'-isopropylidenediphenol	10-25				10	

**FURTHER INFORMATION:** Refer to the regulatory exposure limits for the workforce enforced in each country.

### 8.2 Exposure controls

#### Personal Protection

**RESPIRATORY PROTECTION:** Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

**EYE PROTECTION:** Tightly fitting safety goggles. Safety glasses with side-shields

**HAND PROTECTION:** Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves Chemical resistant apron Long sleeved clothing. Remove and wash contaminated clothing before re-use.

**OTHER PROTECTIVE EQUIPMENT:** No Information

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Amber Liquid
Physical State	Liquid
Odor	Amine Type
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	130 - N.D.
Flash Point, (°C)	95
Evaporation rate	

	Not determined
<b>Flammability (solid, gas)</b>	Not determined
<b>Upper/lower flammability or explosive limits</b>	10 - 20
<b>Vapour Pressure, mmHg</b>	Not determined
<b>Vapour density</b>	Not determined
<b>Relative density</b>	Not determined
<b>Solubility in / Miscibility with water</b>	Not Determined
<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature (°C)</b>	Not determined
<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	Not determined
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined
<b>9.2 Other information</b>	
<b>VOC Content g/l:</b>	0
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	1.050

## 10. Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

### 10.4 Conditions to avoid

Direct sources of heat.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 10.6 Hazardous decomposition products

Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

**Acute Toxicity:**

**Oral LD50:**

**Inhalation LC50:**

**Irritation:** No information available.

**Corrosivity:** No information available.

**Sensitization:** No information available.

**Repeated dose toxicity:** No information available.

**Carcinogenicity:** No information available.

**Mutagenicity:** No information available.

**Toxicity for reproduction:** No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.

Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
111-40-0	diethylenetriamine	1080 mg/kg, oral, rat	1090 mg/kg	10 mg/L / 1 hour, inh, rat
100-51-6	benzyl alcohol	1230 mg/kg rat, oral		1000 ppm/8hrs rat, inhalation
80-05-7	4,4'-isopropylidenediphenol	5000 mg/kg, oral, rat	3000 mg/kg, oral, rabbit	

**Additional Information:**

No Information

## 12. Ecological Information

### 12.1 Toxicity:

**EC50 48hr (Daphnia):** No information

**IC50 72hr (Algae):** No information

**LC50 96hr (fish):** No information

**12.2 Persistence and degradability:** No information

**12.3 Bioaccumulative potential:** No information

**12.4 Mobility in soil:** No information

**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**12.6 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
111-40-0	diethylenetriamine	780 mg/l	No information	430 mg/l
100-51-6	benzyl alcohol	No information	700 mg/L (algae)	10 mg/L (fish)
80-05-7	4,4'-isopropylidenediphenol	10.2 mg/l	No information	205 mg/l

### 13. Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Dispose of in accordance with local regulations.

### 14. Transport Information

<b>14.1 UN number</b>	2735
<b>14.2 UN proper shipping name</b>	Amines, liquid, corrosive, N.O.S. (Contains mixed aliphatic amines)
<b>Technical name</b>	
<b>14.3 Transport hazard class(es)</b>	8
<b>Subsidiary shipping hazard</b>	
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazards</b>	
<b>14.6 Special precautions for user</b>	Not applicable
<b>EmS-No.:</b>	F-A, S-B
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</b>	Not applicable

### 15. Regulatory Information

**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:**

**National Regulations:**

**Denmark Product Registration Number:**

**Danish MAL Code:**

**Sweden Product Registration Number:**

**Norway Product Registration Number:**

**WGK Class:**

**15.2 Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

### 16. Other Information

**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.



H331 Toxic if inhaled.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H361F <undefined>

### Reasons for revision

This is a new Safety Data Sheet (SDS).

### List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

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 ESIS (The European Chemical Substances Information System), provided by the European Commission  
 Joint Research Centre in Ispra, Italy  
 Annex VI of the EU Council Directive 67/548/EEC  
 Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC  
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of  
 substances and mixtures (CLP Regulation)  
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

### Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and

it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

No Information