



## 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<b>1.1</b>	<b>Product identifiers</b> <b>Trade Name or designation</b>	DP2116 BioPhen
<b>1.2</b>	<b>Identification of Uses</b> <b>Uses advised against</b>	Disinfectant concentrate No specific uses are advised against
<b>1.3</b>	<b>Supplier</b>  <b>Telephone No.</b> <b>Fax No.</b> <b>Email</b>	Biolink Limited. Halifax Way Pocklington Ind. Est Pocklington York YO42 1NR +44 (0) 1759 303444 +44 (0) 1759 303158 <a href="mailto:info@biolinklimited.co.uk">info@biolinklimited.co.uk</a>
<b>1.4</b>	<b>Emergency Phone</b>	+44 (0) 1280 738605 (office hours only)

## 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Classification according to 67/548/EEC or 1999/45/EEC as amended

C, Xn, N, R22, R34, R50

#### Classification in accordance to EC 1272/2008 as amended

##### PHYSICAL HAZARDS

Not classified

##### HEALTH HAZARDS

Acute Toxicity Oral	Category 4	H302 Harmful if swallowed
Skin Corrosion	Category 1B	H314 Causes severe skin burns and eye damage
Eye Damage	Category 1	H318 Causes serious eye damage

##### ENVIRONMENTAL HAZARDS

Aquatic Chronic	Category 2	H411 Toxic to aquatic life with long lasting effects
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##### Hazard summary

##### Physical hazards

Not Classified

##### Health hazards

Harmful if swallowed. Causes severe skin burns and eye damage.

##### Environmental hazards

Toxic to aquatic life with long lasting effects

##### Specific hazards

No Specific hazards known.

**Main symptoms**

Harmful if swallowed. Symptoms may include nausea and discomfort. Burning pain and severe corrosive skin damage. Rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**2.2 Label elements**

**Label in accordance with EC 1272/2008 as amended**

**Contains** DIAMINE 7.5%, BIPHENYL-2-OL 2.0 %.

**Hazard pictograms**



**Signal word** Danger

**Hazard statements**

H302-Harmful if swallowed  
 H314 Causes severe skin burns and eye damage  
 H411-Toxic to aquatic life with long lasting effects

**Precautionary statements**

**Prevention**

P280 Wear protective gloves/protective clothing/eye protection/face protection  
 P273 Avoid release to the environment.

**Response**

P301+302 IF SWALLOWED OR ON SKIN: Rinse skin and mouth immediately and seek medical advice.  
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**Storage**

P405 Store Locked up.

**Disposal**

P501 Dispose of contents/container in accordance with local regulations.

**Supplemental label information**

Not applicable

**2.3 Other hazards**

Not known.

**3 - COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2 Mixtures**

PROPAN-2-OL	>5 - <10 %		
CAS-No.: 67-63-0	EC No.: 200-661-7	EC Index No.: 603-117-00-0	Reach No.: 01-2119457558-2
Classification (67/548/EEC) F, Xi, R11, R36, R67	Classification (EC 1272/2008) Flam. liquid 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336		

N-(3-AMINOPROPYL)-N-DODECYLPROPANE-1,3-DIAMINE			7.5 %
CAS-No.: 2372-82-9	EC No.: 219-145-8	EC Index No.:	Reach No.:
Classification (67/548/EEC) C, N, R22, R48/22, R35, R50		Classification (EC 1272/2008) Acute Tox. 3 – H301 Skin Corr. 1B – H314 STOT RE 2 – H373 Aquatic Acute 1 – H400 Aquatic Chronic 1 H410	

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)			1 - 5 %
CAS-No.: 164462-16-2	EC No.: 423-270-5	EC Index No.:	Reach No.:
Classification (67/548/EEC) Not classified		Classification (EC 1272/2008) Met corr. 1 – H290	
			01-0000016977-53

LACTIC ACID			>1 -<5 %
CAS-No.: 50-21-5	EC No.: 200-018-0	EC Index No.:	Reach No.:
Classification (67/548/EEC) Xi, R38, R41		Classification (EC 1272/2008) Skin Irrit. 2 H315 Eye Dam. 1 H318	
			01-2119474164-39

ALCOHOLS, C7-11, ETHOXYLATED			>1 -<5 %
CAS-No.: 68439-46-3	EC No.:	EC Index No.:	Reach No.:
Classification (67/548/EEC) Xi, Xn, R22, R41		Classification (EC 1272/2008) Acute Toxicity 4-H302 Eye Dam. 1-H318	

SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS			>1 -<5 %
CAS-No.: 97489-15-1	EC No.: 307-055-2	EC Index No.:	Reach No.:
Classification (67/548/EEC) Xi, R38, R41		Classification (EC 1272/2008) Acute Tox. 4-H302 Skin Irrit. 2-H315 Eye Dam. 1-H318 Aquatic Chronic 4-H412	
			01-2119489924-20

BIPHENYL-2-OL		2.0 %	
CAS-No.: 201-993-5	EC No.: 201-993-5	EC Index No.: 604-020-00-6	Reach No.:
Classification (67/548/EEC) Xi, N, R36/37/38, R50		Classification (EC 1272/2008) Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	

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

## 4 - FIRST AID MEASURES

### General Information

First aiders should wear suitable protective clothing.

#### 4.1 Description of first aid measures

##### Inhalation

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

##### Ingestion

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

##### Skin contact

Remove contaminated clothing. Wash off with plenty of water. Consult a doctor if symptoms persist.

##### Eye contact

Remove contaminated clothing. Wash off with plenty of water. Consult a physician if symptoms persist.

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

Harmful if swallowed. Symptoms may include nausea and discomfort. Burning pain and severe corrosive skin damage. Rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

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

Rinse eye immediately with sterile saline solution.

Seek medical attention in case of ingestion, inhalation or contact with eyes.

## 5 - FIRE FIGHTING MEASURES

### General Fire Hazards

#### 5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA

Water spray, Dry powder, foam.

UNSUITABLE EXTINGUISHING MEDIA

None

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

UNUSUAL FIRE & EXPLOSION HAZARDS

In case of fire toxic gases may be released. (CO<sub>x</sub>, NO<sub>x</sub>, HCl).

SPECIFIC HAZARDS

None noted.

#### 5.3. Advice for fire-fighters

SPECIAL FIRE FIGHTING PROCEDURES

Collect fire extinguishing water separately, do not allow to enter drains. Exceptionally large spillages should be notified to the appropriate authorities.

PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS  
Wear self-contained breathing apparatus.

## 6 - ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures**  
Keep unnecessary people away. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.
- 6.2. Environmental precautions**  
Do not let product enter drains. Discharge into the environment must be avoided. Appropriate authorities should be notified in case of contamination of sewerage or surface water.
- 6.3. Methods and material for containment and cleaning up**  
Prevent further leakage or spillage if safe to do so. If possible contain the spillage with adsorbent material, place in a suitable container and dispose of as described in section 13 of this safety data sheet.
- 6.4. Reference to other sections**  
Personal protection –section 8.  
Disposal considerations –Section 13.

## 7 - HANDLING AND STORAGE

- 7.1 Precautions for safe handling**  
Ensure good ventilation when using this product, avoid inhalation of vapours and spray. Handle with care and avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Follow instructions and ensure correct dilution of this product before use.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container
- 7.3 Specific end use(s)**  
Disinfectant concentrate

## 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Component	CAS-No.	Value	Control Parameters	Basis
PROPIONIC ACID	67-63-0	TWA	200 ppm 500 mg/m <sup>3</sup>	Austrian OEL Regulation
PROPIONIC ACID	67-63-0	STEL	800 ppm 2000 mg/m <sup>3</sup>	Austrian OEL Regulation
PROPIONIC ACID	67-63-0	TWA	200 ppm 500 mg/m <sup>3</sup>	Belgium VLEP/GWBB
PROPIONIC ACID	67-63-0	STEL	400 ppm 1000 mg/m <sup>3</sup>	Belgium VLEP/GWBB
PROPIONIC ACID	67-63-0	TWA	200 ppm 500 mg/m <sup>3</sup>	Denmark
PROPIONIC ACID	67-63-0	STEL	400 ppm 980 mg/m <sup>3</sup>	Denmark
PROPIONIC ACID	67-63-0	TWA		France INRS
PROPIONIC ACID	67-63-0	STEL	400 ppm 980 mg/m <sup>3</sup>	France INRS
PROPIONIC ACID	67-63-0	TWA	200 ppm 500 mg/m <sup>3</sup>	Germany AGS
PROPIONIC ACID	67-63-0	STEL	400 ppm 1000 mg/m <sup>3</sup>	Germany AGS
PROPIONIC ACID	67-63-0	TWA	200 ppm 500 mg/m <sup>3</sup>	Germany DFG
PROPIONIC ACID	67-63-0	STEL	400 ppm 1000 mg/m <sup>3</sup>	Germany DFG

PROPIONIC ACID	67-63-0	TWA	500 mg/m <sup>3</sup>	Hungary Decree No. 25/2000 (IX.30)
PROPIONIC ACID	67-63-0	STEL	2000 mg/m <sup>3</sup>	Hungary Decree No. 25/2000 (IX.30)
PROPIONIC ACID	67-63-0	TWA	200 ppm	Ireland
PROPIONIC ACID	67-63-0	STEL	400 ppm	Ireland
PROPIONIC ACID	67-63-0	TWA	350 mg/m <sup>3</sup>	Latvia
PROPIONIC ACID	67-63-0	STEL	600 mg/m <sup>3</sup>	Latvia
PROPIONIC ACID	67-63-0	TWA	900 mg/m <sup>3</sup>	Poland - NDS
PROPIONIC ACID	67-63-0	STEL	1200 mg/m <sup>3</sup>	Poland - NDS
PROPIONIC ACID	67-63-0	TWA	200 ppm 500 mg/m <sup>3</sup>	Spain - Royal Decree 374/2001
PROPIONIC ACID	67-63-0	STEL	400 ppm 1000 mg/m <sup>3</sup>	Spain - Royal Decree 374/2001
PROPIONIC ACID	67-63-0	TWA	150 ppm 350 mg/m <sup>3</sup>	Sweden
PROPIONIC ACID	67-63-0	STEL	250 ppm 600 mg/m <sup>3</sup>	Sweden
PROPIONIC ACID	67-63-0	TWA	200 ppm 500 mg/m <sup>3</sup>	Switzerland
PROPIONIC ACID	67-63-0	STEL	400 ppm 1000 mg/m <sup>3</sup>	Switzerland
PROPIONIC ACID	67-63-0	TWA	400 ppm 999 mg/m <sup>3</sup>	UK - EH40 WEL
PROPIONIC ACID	67-63-0	STEL	500 ppm 1250 mg/m <sup>3</sup>	UK - EH40 WEL

**Biological limit values**

**Recommended monitoring procedures**

Follow standard monitoring procedures.

**Derived no-effect level (DNEL)**

PROPAN-2-OL

Route	Use	Effect	Time	Value
Dermal	Worker	Chronic	1d	888mg/kg
Inhalation	Worker	Chronic		500mg/m <sup>3</sup>
Dermal	Consumer	Chronic	1d	319 mg/kg
Ingestion	Consumer	Chronic	1d	26 mg/kg

SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS

Route	Use	Effect	Time	Value
Dermal	Worker	Acute Local		2.8 mg/cm <sup>2</sup>
Dermal	Worker	Systemic	Long Term	5 mg/kg/bw/d
Inhalation	Worker	Systemic	Long Term	35 mg/m <sup>3</sup>
Dermal	Worker	Local	Long Term	2.8 mg/cm <sup>2</sup>
Dermal	Consumer	Acute Local		2.8 mg/cm <sup>2</sup>
Dermal	Consumer	Systemic	Long Term	3.57 mg/kg/bw/d
Inhalation	Consumer	Systemic	Long Term	12.4 mg/m <sup>3</sup>
Oral	Consumer	Systemic	Long Term	7.1 mg/kg/bw/d
Dermal	Consumer	Local	Long Term	2.8 mg/cm <sup>2</sup>

**Predicted no effect concentrations (PNECs)**

PROPAN-2-OL

Route	Value
Freshwater	140.9 mg/l
Marine water	140.9 mg/l
Freshwater sediment	552 mg/kg
Marine sediment	552 mg/kg
Soil	28 mg/kg

## SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS

Route	Value
Freshwater	0.04 mg/l
Freshwater sediment	9.4 mg/kg (DW)
Intermittent release	0.06 mg/l
Marine sediment	0.94 mg/kg (DW)
Marine water	0.04 mg/l
STP	600 mg/l
Soil	9.4 mg/kg (DW)

## 8.2 Exposure controls

**Appropriate Engineering controls**

No specific engineering measures are noted except that this product should be used in a well ventilated area.

**Individual protection measures, such as personal protective equipment**

In case of splashing wear suitable protective equipment.

**General information**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

**Respiratory equipment**

Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator.

**Hand protection**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

## Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.6 mm

Break through time: >480 min

## Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: >35 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Eye protection**

In case of splashing, wear safety goggles or face shield.

**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 at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke

**Environmental exposure controls**

Do not discharge into the watercourse or drains

**9 - PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

Physical State:	Liquid
Form:	Solution
Colour:	Clear
Odour:	Alcoholic
pH:	10.0 (approx. undiluted)
BP/BP Range:	>100
MP/MP Range:	<0°C
SG/Density:	1.0 – 1.05 g/ml (1.02)
Solubility:	Completely miscible in water

**9.2. Other information**

Not available

**10 - STABILITY AND REACTIVITY****10.1 Reactivity**

Not expected under normal conditions of use

**10.2 Chemical stability**

Stable under normal temperature conditions

**10.3 Possibility of hazardous reactions**

Not expected under normal conditions of use

**10.4 Conditions to avoid**

Avoid exposure to high temperatures or direct sunlight

**10.5 Incompatible materials**

Materials to avoid -strong acids or alkalis. Oxidising agents.

**10.6 Hazardous decomposition products**

None, see section 5 for decomposition products under fire conditions

**11 - TOXICOLOGICAL INFORMATION****General information****Information on likely routes of exposure****Inhalation**

Burning pain and severe corrosive skin damage

**Skin contact**

Burning pain and severe corrosive skin damage. Rash.

**Eye contact**

Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Ingestion**

Harmful if swallowed. Symptoms may include nausea and discomfort

**Symptoms**

Harmful if swallowed. Symptoms may include nausea and discomfort. Burning pain and severe corrosive skin damage. Rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.



## 11.1 Information on toxicological effects

**Acute toxicity**

PROPAN-2-OL	Oral	LD50	>2000 mg/kg (Rat)
PROPAN-2-OL	Dermal	LD50	>200 mg/kg (Rat)
N-(3-Aminopropyl)-N-dodecylpropane-1, 3-diamine	Oral	LD50	871 mg/kg (Rat)
	Dermal	LD50	>2000 mg/kg (Rat)
ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)	Oral	LD50	>4000 mg/kg
	Inhalation	LC50 4h	>5mg/l
	Dermal	LD50	>4000 mg/kg
LACTIC ACID	Oral	LD50	3730 mg/kg (Rat)
LACTIC ACID	Dermal	LD50	>2000 mg/kg (Rabbit)
ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO	Oral	LD50	>200-2000 mg/kg (Rat)
SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS	Oral	LD50	>500-2000 mg/kg (Rat)
	Dermal	LD50	>2000 mg/kg (Mouse)
BIPHENYL-2-OL	Oral	LD50	2980 mg/kg (Rat)
BIPHENYL-2-OL	Dermal	LD50	>5000 mg/kg (Rat)
BIPHENYL-2-OL	Inhalation	LC50 4h	>36 mg/m <sup>3</sup> (Vapour)

**Skin corrosion/irritation**

PROPAN-2-OL	Rabbit		Not irritating
N-(3-Aminopropyl)-N-dodecylpropane-1, 3-diamine	OECD 404	4 h	Corrosive
ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)	OECD 404		Not irritating
LACTIC ACID	Draize Test	24 h	500 mg (Rabbit) Severe
LACTIC ACID	Draize Test	24 h	100 mg (Rabbit) Moderate
LACTIC ACID	OECD 404		Irritating (Rabbit)
SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS	OECD 404		Irritant
BIPHENYL-2-OL	Rabbit		Moderate Irritant

**Serious eye damage/eye irritation**

PROPAN-2-OL	Rabbit		Irritating
ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)	OECD 405		Not irritating
LACTIC ACID	Draize Test		750µg (Rabbit) Severe
SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS	OECD 405		Risk of serious damage to eyes
BIPHENYL-2-OL	Rabbit		Severe Irritant

**Respiratory Sensitisation**

Based on the available data not classified as a respiratory sensitiser

**Skin sensitisation**

PROPAN-2-OL	Buehler Test		Not Sensitising (Guinea Pig)
N-(3-Aminopropyl)-N-dodecylpropane-1, 3-diamine	OECD 406		Not sensitising
ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)	OECD 406		Not sensitising
SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS	OECD 406		Not Sensitising (Guinea pig)
BIPHENYL-2-OL	Guinea pig		Not Sensitising

**Germ cell mutagenicity**

PROPAN-2-OL	Ames Test	Negative ( <i>Salmonella typhimurium</i> )
N-(3-Aminopropyl)-N-dodecylpropane-1, 3-diamine	OECD 471	Negative ( <i>Salmonella typhimurium</i> )
	OECD 476	Negative (CH –cells V79)
	OECD 473	Negative (CH –cells V79)
ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)	OECD 471	Negative
	HGPRT assay	Negative
	Micronucleus assay	Negative

**Carcinogenicity**

Based on the available data not classified as a carcinogen.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

PROPAN-2-OL Group 3

**Reproductive toxicity**

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)	OECD 421/422	Negative
Developmental toxicity	NOAEL	>2000 mg/kg Oral (Rat)

**Specific target organ toxicity - single exposure**

Based on the available data not classified as a STOT SE.

**Specific target organ toxicity - repeated exposure**

ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)	OECD 453	NOAEL	530 mg/kg Oral (Rat)
May cause damage to the kidney after repeated ingestion of high doses-animal studies			

**Aspiration hazard**

Based on the available data not classified as an aspiration hazard.

**Mixture versus substance information**

No data available.

**Other information**

Not available.

**12 - ECOLOGICAL INFORMATION**

**12.1 Toxicity**

PROPAN-2-OL		
Toxicity to fish	LC50 48 h	>100 mg/l <i>Leuciscus idus Melanotus</i>
Toxicity to aquatic invertebrates	EC50 48 h	>100 mg/l <i>Daphnia magna</i>
Toxicity to Algae	EC50 72 h	>100 mg/l <i>Scenedesmus subspicatus</i>
N-(3-AMINOPROPYL)-N-DODECYLPROPANE-1, 3-DIAMINE		
Toxicity to fish	LC50 96 h	0.68 mg/l <i>Oncorhynchus mykiss</i>
	LC50 96 h	0.45 mg/l <i>Lepomis macrochirus</i>
Toxicity to aquatic invertebrates	EC50 48 h	0.73 mg/l <i>Daphnia magna</i>
	NOEC 21 d	0.024 mg/l <i>Daphnia magna</i>
Toxicity to Algae	ErC50 96 h	0.054 mg/l <i>Ps. subcapitata</i>
	ErC10 72 h	0.012 mg/l <i>Desmodesmus subspicatus</i>
Toxicity to Bacteria	EC50 3 h	18 mg/l Activated sludge
ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)		
Toxicity to fish	LC50 96 h	>200 mg/l <i>Brachydanio rerio</i>
	NOEC 28d	≥ 200 mg/l <i>Oncorhynchus mykiss</i>
Toxicity to aquatic invertebrates	EC50 48 h	>200 mg/l <i>Daphnia magna</i>
	NOEC 21d	≥ 200 mg/l <i>Daphnia magna</i>
Toxicity to Algae	EC50 72 h	>200 mg/l <i>Scenedesmus subspicatus</i>
Toxicity to Bacteria	EC20 0.5h	> 2000mg/l activated sludge
LACTIC ACID		
Toxicity to fish	LC50 96 h	320 mg/l
Toxicity to aquatic invertebrates	EC50 48 h	240 mg

	Toxicity to Algae	EC50 7 h	3500 mg/l
	ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO		
	Toxicity to fish	LC50 96 h	1-10 mg/l
	SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS		
	Toxicity to fish	LC50 96 h	1-10 mg/l <i>Danio rerio</i>
	Toxicity to aquatic invertebrates	EC50 48 h	9.81 mg/l <i>Daphnia magna</i>
	Toxicity to Algae	EC50 72 h	> 61 mg/l <i>Desmodesmus subspicatus</i>
	Toxicity to Bacteria	NOEC 16 h	600 mg/l <i>Pseudomonas putida</i>
	BIPHENYL-2-OL		
	Toxicity to fish	LC50 96 h	4 mg/l <i>Oncorhynchus mykiss</i>
	Toxicity to aquatic invertebrates	EC50 48 h	2.7 mg/l <i>Daphnia magna</i>
	Toxicity to Algae	EC50 72 h	1.35 mg/l
<b>12.2</b>	<b>Persistence and degradability</b>		
	PROPAN-2-OL	Readily biodegradable	
	PROPAN-2-OL	10 d 7mg/l	> 70%
	N-(3-AMINOPROPYL)-N-DODECYLPROPANE-1, 3-DIAMINE		
		OECD 303 A 12-15 d	96 %
		OECD 302 B 28 d	91 %
		OECD 301 D 28 d	79 %
		Mineralisation 28 d	73.8 %
	ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)		
		Readily biodegradable	
		OECD 301 F 28 d	80-90% BOD or the ThOD
		OECD 311 60 d	80-90% TIC of the ThIC
	LACTIC ACID		
		Degradation 80% Conc.5 d	50%
		Degradation 80% Conc 20 d	65%
		BOD 5	0.45mg
		BOD 20	0.60 mg
		COD	0.90 mg
	SULPHONIC ACIDS, C14-17-SEC-ALKANE, SODIUM SALTS		
		Readily biodegradable	
		OECD 301 B 28 d	78%
		OECD 301 E 28 d	89%
		OECD 303 A 34 d	96.2%
		DOC	322 mg/kg
		COD	1510 mg/kg
	BIPHENYL-2-OL		
		Readily biodegradable	
		OECD 301 D 28 d	75%
<b>12.3</b>	<b>Bioaccumulative potential</b>		
	BIPHENYL-2-OL		
		BCF	22
		Potential	Low
	<b>Partition coefficient n-octanol/water (log Kow)</b>		
	ALANINE, N,N-BIS(CARBOXYMETHYL)-,SODIUM SALT (1:3)		
		LogKow	-4.0
	LACTIC ACID		
		Log Pow 0.62 @ 20°C	
	BIPHENYL-2-OL		
		Log Pow 3	
<b>12.4</b>	<b>Mobility in soil</b>		
	No data available		
<b>12.5</b>	<b>Results of PBT and vPvB assessment</b>		
	No data available		
<b>12.6</b>	<b>Other adverse effects</b>		
	Not known		

## 13 - DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements

**Residual waste**

Dispose of waste and residues in accordance with local authority requirements

**Contaminated packaging**

Dispose of as unused product.

**EU Waste Code**

02-01-08

**Disposal methods/information**

Wear protective equipment as outlined in section 8 of this safety data sheet when handling this product contaminated materials and packaging.

**Special precautions**

Not noted.

## 14 - TRANSPORT INFORMATION

## Road Transport Notes

**14.1 UN-number**

ADR/RID: 3267

IMDG: 3267

IATA: 3267

**14.2 UN proper shipping name**

ADR/RID: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (N, N-Bis (3-aminopropyl) dodecylamine)

IMDG: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (N, N-Bis (3-aminopropyl) dodecylamine)

IATA: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (N, N-Bis (3-aminopropyl) dodecylamine)

**14.3 Transport hazard class (es)**

ADR/RID: 8 (C7)

IMDG: 8

IATA: 8

**14.4 Packaging group**

ADR/RID: III

IMDG: III

IATA: III

**14.5 Environmental hazards**

Marine pollutant: Yes

**14.6 Special precautions for users**

None

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

N/A

**Further information**

Limited quantities: 5 L

Expected quantities: EL

Transport Category (Tunnel Restriction Code): 3 (E)

Hazard Identification Number: 80

## 15 - REGULATORY INFORMATION

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

**Other regulations** The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

**15.2 Chemical Safety Assessment**

**National regulations** Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

**15.2 Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

**16 - OTHER INFORMATION****List of abbreviations**

CO Carbon Monoxide  
NO Nitrogen Oxide  
HCL Hydrochloric acid  
TWA Time weighted average  
STEL Short Term exposure limit  
DW Dry weight

**References****Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

**Full text of any statements or R-phrases and H-statements under Sections 2 to 15**

C Corrosive  
Xn Harmful  
N Dangerous to the environment  
F Flammable  
Xi Irritant  
R11 Highly Flammable  
R22 Harmful if swallowed  
R34 Causes burns  
R35 Causes severe burns  
R36 Irritating to eyes  
R36/37/38 Irritating to eyes, respiratory system and skin  
R38 Irritating to skin  
R41 Risk of serious damage to eyes  
R48/22 harmful: Danger of serious damage to health by prolonged exposure if swallowed  
R50 Very toxic to aquatic organisms  
R67 Vapours may cause drowsiness and dizziness  
H225 Highly flammable liquid and vapour  
H290 May be corrosive to metals  
H301 Toxic if swallowed  
H302 Harmful if swallowed  
H314 Causes severe skin burns and eye damage  
H315 Causes skin irritation  
H318 Causes serious eye damage  
H319 Causes serious eye irritation

H335 May cause respiratory irritation  
H336 May cause drowsiness or dizziness  
H373 May cause damage to organs through prolonged or repeated exposure  
H400 Very toxic to aquatic life  
H411 Toxic to aquatic life with long lasting effects  
H412 Harmful to aquatic life with long lasting effects  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P273 Avoid release to the environment.  
P301+302 IF SWALLOWED OR ON SKIN: Rinse skin and mouth immediately and seek medical advice.  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P405 Store Locked up.  
P501 Dispose of contents/container in accordance with local regulations.

**Training information** Follow training instructions when handling this material.

#### **Disclaimer**

Biolink cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. The information in the sheet was written based on the best knowledge and experience currently available.