

## SAFETY DATA SHEET

Safety Data Sheet according to regulation (EC) No 1907/2006 & 1272/2008 and amendments

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

#### 1.1 PRODUCT IDENTIFIER **ACURE™ 500**

**Product Description:** Catalyst

**Unique Formula Identifier (UFI)** KC90-J07Q-E00Y-XK8K

#### 1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

**Intended/Recommended Use:** Raw material for surface coatings

**Uses advised against:** -

#### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

**Company:** Allnex Belgium SA/NV, Anderlechtstraat, 33, 1620 Drogenbos, BE.

**For Product and all Non-Emergency Information call** your local Allnex contact point or contact us at <http://www.allnex.com/contact>

**Local Contact Information:** Allnex Belgium SA/NV, Anderlechtstraat, 33, 1620 Drogenbos, BE  
Telephone no.: +32 (0) 2-3345111

#### 1.4 EMERGENCY TELEPHONE NUMBER

**EMERGENCY TELEPHONE NUMBER (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:**

**Europe**

+44 (0) 1235 239 670 (Carechem 24)

**Middle East, Africa**

+44 (0) 1235 239 671 (Carechem 24)

See Section 16 for Emergency phone numbers for other regions.

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### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

**Classification according to Regulation (EC) No 1272/2008 and amendments**

Flammable Liquid Hazard Category 3

Acute Toxicity (Oral) Hazard Category 4

Acute Toxicity (Dermal) Hazard Category 4

Acute Toxicity (Inhalation) Hazard Category 4

Specific Target Organ Toxicity (STOT) - Single Exposure Hazard Category 3

Serious Eye Damage / Eye Irritation Hazard Category 1  
Aquatic Environment Long-term Hazard Category 2

## 2.2 LABEL ELEMENTS



### Signal Word

Danger

### Hazard Statements

H226 - Flammable liquid and vapour.  
H302 - Harmful if swallowed.  
H312 - Harmful in contact with skin.  
H332 - Harmful if inhaled.  
H336 - May cause drowsiness or dizziness.  
H318 - Causes serious eye damage.  
H411 - Toxic to aquatic life with long lasting effects.

### Precautionary Statements

Precautionary statements on the label will be reduced as indicated in Regulation (EC) No 1272/2008, Article 28.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P264 - Wash face, hands and any exposed skin thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P370 + P378 - In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P330 - Rinse mouth.  
P322 - Specific measures (see supplemental first aid instructions on this label).  
P363 - Wash contaminated clothing before reuse.  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER or doctor/physician.  
P391 - Collect spillage.  
P403 + P235 - Store in a well-ventilated place. Keep cool.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

## 2.3 OTHER HAZARDS

Not applicable

## RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

## ENDOCRINE DISRUPTOR INFORMATION

### Endocrine disrupting - health:

Not applicable

### Endocrine disrupting - environment:

Not applicable

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance, Mixture or Article? Mixture

### 3.2 MIXTURES

Component / CAS No.	%	EC-No	REACH Registration Number	Classification according to Regulation (EC) No. 1272/2008 [CLP]	EU - CLP EUH Codes
1-Propanol 71-23-8	15-30	200-746-9	01-2119486761-29	Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Dam. 1 (H318)	
Tetrabutylammonium hydroxide 2052-49-5	15-25	218-147-6	01-2120231229-61	Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318)	
Ethanol 64-17-5	5-10	200-578-6	01-2119457610-43	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319)	

See Section 16 for full text of H phrases.

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## SECTION 4: FIRST AID MEASURES

### 4.1 DESCRIPTION OF FIRST AID MEASURES

#### Eye Contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Skin Contact:

Wash immediately with plenty of water and soap.

#### Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

#### Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known.

### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

Not applicable.

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## SECTION 5: FIREFIGHTING MEASURES

### 5.1 EXTINGUISHING MEDIA

**Suitable Extinguishing Media:**

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

**Unsuitable Extinguishing Media:**

full water jet.

### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Keep containers cool by spraying with water if exposed to fire.

### 5.3 ADVICE FOR FIREFIGHTERS

**Protective Equipment:**

Wear self contained breathing apparatus for fire fighting if necessary.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

### 6.2 ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment.

### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

### 6.4 REFERENCES TO OTHER SECTIONS

See Sections 7, 8 and 13 for additional information.

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## SECTION 7: HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

**Precautions:** Avoid release to the environment. Keep away from heat, sparks and open flame. - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and other equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing vapors or spray mist. Wear protective gloves/clothing and eye/face protection.

**Special Handling Statements:** Provide good ventilation of working area (local exhaust ventilation if necessary). During processing and handling of the product, comply with the indicative occupational exposure limit values. Containers must be bonded and grounded when pouring or transferring material.

## 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in a cool, dry, well ventilated place and keep container tightly closed. Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material's flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed. Keep away from sources of ignition - refrain from smoking. Take precautionary measures against electrostatic loading - earthing necessary during loading operations. Observe the general rules of industrial fire protection.

**Storage Temperature:** Store at 0 - 30 °C

**Reason:** Quality.

**Storage Class (TRGS 510):** 3

## 7.3 SPECIFIC END USE(S)

Refer to Section 1 or Exposure Scenario if applicable.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

#### 71-23-8 1-Propanol

United Kingdom: WEL (Workplace Exposure Limits)	200 ppm (TWA)
	500 mg/m <sup>3</sup> (TWA)
	(skin)
	250 ppm (STEL)
	625 mg/m <sup>3</sup> (STEL)
Europe ILV (Indicative Limit Values):	Not established
Other Value:	Not established

#### 64-17-5 Ethanol

United Kingdom: WEL (Workplace Exposure Limits)	1000 ppm (TWA)
	1920 mg/m <sup>3</sup> (TWA)
	3000 ppm (STEL)
	5760 mg/m <sup>3</sup> (STEL)
Europe ILV (Indicative Limit Values):	Not established
Other Value:	Not established

### Biological Exposure Limit(s)

No values have been established.

### Derived No Effect Level (DNEL):

#### 1-Propanol (71-23-8)

Use	Route	DNEL	Units	Effects Type
Consumer	Dermal	81	mg/kg	Long term, systemic
Consumer	inhalation	80	mg/m <sup>3</sup>	Long term, systemic
Consumer	Oral	61	mg/kg	Long term, systemic
Consumer	inhalation	1036	mg/m <sup>3</sup>	Short term, systemic
Worker	Dermal	136	mg/kg	Long term, systemic
Worker	inhalation	268	mg/m <sup>3</sup>	Long term, systemic
Worker	inhalation	1723	mg/m <sup>3</sup>	Short term, systemic

#### Tetrabutylammonium hydroxide (2052-49-5)

Use	Route	DNEL	Units	Effects Type
Worker	inhalation	4.93	mg/m <sup>3</sup>	Long term, systemic
Worker	Dermal	1.4	mg/kg/day	Long term, systemic

General Population	inhalation	0.87	mg/m <sup>3</sup>	Long term, systemic
General Population	Dermal	0.5	mg/kg/day	Long term, systemic
General Population	Oral	0.5	mg/kg/day	Long term, systemic

**Ethanol (64-17-5)**

Use	Route	DNEL	Units	Effects Type
Worker	Dermal	343	mg/kg	Long term, systemic
Worker	inhalation	950	mg/m <sup>3</sup>	Long term, systemic
Consumer	Dermal	206	mg/kg	Long term, systemic
Consumer	inhalation	114	mg/m <sup>3</sup>	Long term, systemic
Consumer	Oral	87	mg/kg	Long term, systemic
Worker	inhalation	950	mg/m <sup>3</sup>	Long term, systemic

**Predicted No Effect Concentration (PNEC):****1-Propanol (71-23-8)**

Compartment	PNEC	Units
Fresh water	6.83	mg/l
Marine water	0.683	mg/l
Sediment (fresh water)	27.5	mg/kg
Sediment (marine water)	2.75	mg/kg
Soil	1.49	mg/kg
Sewage treatment plant	96	mg/l
Intermittent water release	10	mg/l

**Ethanol (64-17-5)**

Compartment	PNEC	Units
Fresh water	0.96	mg/l
Marine water	0.79	mg/l
Sediment (fresh water)	3.6	mg/kg
Soil	0.63	mg/kg
Sewage treatment plant	580	mg/l
Sediment (marine water)	2.9	mg/kg
Secondary Poisoning	380	mg/kg food
Intermittent water release	2.75	mg/l

**8.2 EXPOSURE CONTROLS****Engineering Measures:**

Utilize a closed system process where feasible.

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

**Respiratory Protection:**

For operations where inhalation exposure can occur use an approved respirator. Recommendations are listed below. Other protective respiratory equipment may be used based on user's own risk assessment.

Recommended:

Full Face Mask with organic vapor cartridge, Type A filter (BP >65°C)

**Eye protection:**

Prevent eye and skin contact.

Provide eye wash fountain and safety shower in close proximity to points of potential exposure.

Wear eye/face protection such as chemical splash proof goggles or face shield.

**Skin Protection:**

Avoid skin contact.

Wear impermeable gloves and suitable protective clothing.

**Hand protection:**

Wear protective gloves. Recommendations are listed below. Other protective materials may be used based on user's own risk assessment. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility etc.) is noticed.

The selected protective gloves have to satisfy the specifications of EU Regulation (EC) 2016/425 and standard EN ISO 374-1:2016.

Gloves for repeated or prolonged exposure - non exhaustive list:

Nitrile rubber (NBR), thickness: > 0.38 mm, break through time: > 480 min

Gloves for short term exposure/splash protection - non exhaustive list:

Nitrile rubber (NBR), thickness: 0.12 mm, break through time: up to 120 min

The chemical resistance depends on the type of product and amount of product on the glove. Therefore gloves need to be changed when in contact with chemicals.

Not suitable gloves - non exhaustive list:

Natural rubber (NRL), thickness: 0.12 mm

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing. Use PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition or unknown properties of the chemicals.

#### **Additional Advice:**

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

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## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	liquid clear
<b>Colour:</b>	colourless
<b>Odor Threshold:</b>	See Section 8 for exposure limits.
<b>Melting Point:</b>	Not available
<b>Boiling Point:</b>	100 °C
<b>Flammability:</b>	Not available
<b>Flammable Limits (% By Vol):</b>	Not available
<b>Flash point:</b>	27 °C
<b>Autoignition temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>pH:</b>	10.4
<b>Viscosity (Kinematic):</b>	Not applicable
<b>Viscosity (Dynamic):</b>	Not available
<b>Solubility In Water:</b>	Not available
<b>Solubility In Solvent:</b>	Not available
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Vapor Pressure:</b>	Not available
<b>Specific Gravity/Density:</b>	0.95 g/cm <sup>3</sup>
<b>Vapour density:</b>	Not available
<b>Particle characteristics:</b>	Not applicable

### **9.2 OTHER INFORMATION**

#### **9.2.1 Information with regard to physical hazard classes**

Not applicable

### 9.2.2 Other safety characteristics

Not applicable

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## SECTION 10: STABILITY AND REACTIVITY

**10.1 REACTIVITY** No information available

**10.2 CHEMICAL STABILITY** Stable

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

**Polymerization:** Will not occur  
**Conditions To Avoid:** None known.

**10.4 CONDITIONS TO AVOID** Protect from heat and direct sunlight.

**10.5 INCOMPATIBLE MATERIALS** Strong oxidizing agents, Strong acids, Strong bases

**10.6 HAZARDOUS DECOMPOSITION PRODUCTS** None known

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## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

**Likely Routes of Exposure:** Skin, Eyes, Oral, Respiratory System.

**Acute toxicity - oral:** Harmful if swallowed

**Acute toxicity - dermal:** Harmful in contact with skin

**Acute toxicity - inhalation:** Harmful if inhaled

**Skin corrosion / irritation:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Serious eye damage / eye irritation:** Causes serious eye damage

**Respiratory sensitization:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Skin sensitization:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Carcinogenicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Germ cell mutagenicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Reproductive toxicity:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure:** May cause drowsiness or dizziness.

**Specific target organ toxicity (STOT) - repeated exposure:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Aspiration hazard:** Not Classified - Based on available data and/or professional judgment, the classification



criteria are not met.

## PRODUCT TOXICITY INFORMATION

### ACUTE TOXICITY DATA

oral (gavage)	rat	Acute LD50	1710 - 3500 mg/kg (Calculated)
dermal	rabbit	Acute LD50	1250 - 2500 mg/kg (Calculated)
inhalation	rat	Acute LC50 4 hr	> 2.58 mg/l (Dust/Mist)

**Specific target organ toxicity (single exposure):** May cause drowsiness or dizziness.

### LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	Skin	mild
Acute Irritation	eye	Causes serious damage

### ALLERGIC SENSITIZATION

Sensitization	Skin	Not sensitizing
Sensitization	respiratory	No data

### GENOTOXICITY

#### Assays for Gene Mutations

Ames Salmonella Assay	Not mutagenic
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### OTHER INFORMATION

The toxicity data above are the results from a calculation of components with data from Allnex sponsored studies or available public literature.

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## HAZARDOUS INGREDIENT TOXICITY DATA

1-Propanol has an oral (rat) LD50 of 1870 mg/kg and a dermal (rabbit) LD50 of 5040 mg/kg. The 4-hour LC-50 for n-propanol is 1000-5000 ppm (8-40 mg/L). Direct contact may produce mild skin irritation and moderate eye irritation. Acute inhalation overexposure to propanol vapors may initially produce irritation of the eyes and the respiratory system. Prolonged exposure will result in lessening of these symptoms due to a local anesthetic effect. Prolonged or repeated exposure to n-propanol may also produce headache, dizziness, confusion, staggered gait, and loss of consciousness.

Tetrabutylammonium hydroxide has an acute oral (rat) LD50 value of 300-2000mg/kg. As this substance has a pH-value of 14, several endpoints could not be tested for reasons of animal welfare (acute dermal and inhalation toxicity, skin and eye irritation, sensitization). In vitro studies have not revealed the potential for genotoxic effects. Based on information obtained from structural analogues (salts), target organ toxicity and prenatal toxicity are not expected. Reproductive performances were not affected either.

Ethanol has acute oral (rat) and dermal (rabbit) LD50 values of 10470 mg/kg and > 20,000 mg/kg, respectively. The 4-hour inhalation LC50 for ethanol in rats is 117-125 mg/l. Inhalation overexposure may cause respiratory tract irritation. Ethanol is a potent teratogen associated with abnormal fetal formation, growth retardation, neurological damage, and behavioral alterations in children with fetal alcohol syndrome. Chronic ingestion of ethanol may cause damage to the liver, heart and gastrointestinal tract. In a dominant lethal assay, male mice treated with ethanol over a three day period showed significant decrease in average litter size along with increased incidence of dead implants. Ethanol is reported to have shown positive results in in vivo and in vitro screening tests for mutagenicity. Direct contact with ethanol may cause moderate eye irritation and mild skin irritation. Ethanol may cause central nervous system depression that causes stupor, coma and eventually death if ingested in excessive quantities. The literature

shows that due to synergistic and potentiating effects, the toxicity of ethanol may be enhanced by exposure to halogenated hydrocarbons and Manganese.

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## SECTION 12: ECOLOGICAL INFORMATION

### TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

**Aquatic Chronic Toxicity:** Toxic to aquatic life with long lasting effects

Based on allnex sponsored studies.

#### 12.1 ECOTOXICITY

Not available

#### ALGAE TEST RESULTS

**Test:** OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test

**Duration:** 72 hr

**Species:** *Pseudokirchneriella subcapitata*

4.55 mg/l EC50

0.23 mg/l EC10

#### FISH TEST RESULTS

**Test:** Acute toxicity, freshwater (OECD 203)

**Duration:** 96 hr.

**Species:** Rainbow Trout (*Oncorhynchus mykiss*)

> 2000 mg/l LC50

#### INVERTEBRATE TEST RESULTS

**Test:** Acute Immobilization (OECD 202)

**Duration:** 48 hr

**Species:** Water Flea (*Daphnia magna*)

4.7 mg/l EC50

#### 12.2 PERSISTENCE AND DEGRADABILITY

Not available

#### DEGRADATION

**Test:** Closed Bottle (OECD 301D)

**Duration:** 28 day **Procedure:** Ready biodegradability

12.5 %

#### 12.3 BIOACCUMULATIVE POTENTIAL

Not available

#### 12.4 MOBILITY IN SOIL

Not available

#### 12.5 RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

## 12.6 ENDOCRINE DISRUPTING PROPERTIES

No Hazardous Ingredients

## 12.7 OTHER ADVERSE EFFECTS

Not available

## HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
1-Propanol (71-23-8)	LC50 = 4480 mg/L - Pimephales promelas (96h)
Tetrabutylammonium hydroxide (2052-49-5)	LC50 > 100 mg/L - Danio rerio - 96hrs (category approach)
Ethanol (64-17-5)	LC50 12.0 - 16.0 mL/L - Oncorhynchus mykiss (96h)  LC50 > 100 mg/L - Pimephales promelas (96h)  LC50 13400 - 15100 mg/L - Pimephales promelas (96h)

Component / CAS No.	Toxicity to Water Flea
1-Propanol (71-23-8)	EC50 = 3642 mg/L - Daphnia magna (48h)  EC50 3339 - 3977 mg/L - Daphnia magna (48h)
Tetrabutylammonium hydroxide (2052-49-5)	EC50 = 16.5 mg/L - Daphnia magna - 48hrs (category approach)
Ethanol (64-17-5)	LC50 9268 - 14221 mg/L - Daphnia magna (48h)  EC50 = 2 mg/L - Daphnia magna (48h)

Component / CAS No.	Toxicity to Algae
1-Propanol (71-23-8)	Not available
Tetrabutylammonium hydroxide (2052-49-5)	EC50 > 100 mg/L - Chlorella vulgaris - 72hrs (category approach)
Ethanol (64-17-5)	Not available

Component / CAS No.	Partition coefficient
1-Propanol (71-23-8)	0.2
Tetrabutylammonium hydroxide (2052-49-5)	1.518
Ethanol (64-17-5)	-0.35

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 WASTE TREATMENT METHODS

The company encourages the recycle and reuse of products and packaging, where possible and permitted.

#### Product disposal

When recycle or reuse is not possible, the company recommends that our products, especially when classified as hazardous, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed. For disposal within the European Community, waste codes according to Directive 2008/98/EC

should be assigned by the user based on the application for which the product was used.

**Packaging disposal**

Handle contaminated packages in the same way as the product itself. Disposal of emptied and cleaned packaging must be made in accordance with applicable local and national regulations.

**Disposal-relevant information**

Do not release directly or indirectly to surface water, ground water, soil or public sewage system.

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**SECTION 14: TRANSPORT INFORMATION**

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

**SUBSECTION 14.1 TO 14.5****ADR/RID/ADN**

Dangerous Goods?	X
UN Number:	UN1993
UN PROPER SHIPPING NAME:	FLAMMABLE LIQUID, N.O.S.
TECHNICAL NAME (N.O.S.):	1-PROPANOL
Transport Hazard Class:	3
Transport Label Required:	Flammable liquid
Packing Group:	III
Tunnel restriction code:	D/E
Comments:	Not intended for shipment by inland waterways in tank vessels. This material is environmentally hazardous according to the criteria of the UN Model Dangerous Goods Regulations and/or is a marine pollutant according to the IMDG Code.

**IMO**

Dangerous Goods?	X
UN Number:	UN1993
UN PROPER SHIPPING NAME:	FLAMMABLE LIQUID, N.O.S.
TECHNICAL NAME (N.O.S.):	1-PROPANOL
Transport Hazard Class:	3
Marine Pollutant	
Transport Label Required:	Flammable liquid Marine Pollutant
Packing Group:	III

**ICAO / IATA**

Dangerous Goods?	X
UN Number:	UN1993
UN PROPER SHIPPING NAME:	FLAMMABLE LIQUID, N.O.S.
TECHNICAL NAME (N.O.S.):	1-PROPANOL
Transport Hazard Class:	3
Transport Label Required:	Flammable liquid
Packing Group:	III

**14.6 SPECIAL PRECAUTIONS FOR USER**

Protect from freezing and protect against external heat sources above +30°C.

**14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE**

No information available

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**SECTION 15: REGULATORY INFORMATION**

## 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

**Ozone Depleting Substances (Regulation (EC) No 1005/2009):** Not applicable

**Persistent Organic Pollutants (Regulation (EC) No 850/2004):** Not applicable

**Prior Informed Consent (Regulation (EC) No 689/2008):** Not applicable

**Substances subject to Authorization (Annex XIV of Regulation (EC) No 1907/2006):** Not applicable

**Substances subject to Restrictions for certain applications(Annex XVII of Regulation(EC)No 1907/2006):** Yes  
Refer to Annex XVII of REACH for details of the restricted applications.

Diethyl carbonate (~ 17 %)

This substance is a flammable restricted for aerosols under item 40.

1-Propanol (15-30 %)

This substance is a flammable restricted for aerosols under item 40.

Tetrabutylammonium hydroxide (15-25 %)

This substance is a flammable restricted for aerosols under item 40.

**Water Endangering Class (Germany):** 1 according to AwSV, 18.04.2017

### Inventory Information

**European Economic Area (including EU):** When purchased and shipped from an Allnex legal entity based in the EEA (EU or Norway), this product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt and/or registered.

**United Kingdom:** When purchased from allnex UK this product is compliant with the UK-REACH Regulation as all its components are either notified, excluded, exempt and/or registered. If the material has been purchased by your legal entity based in GB from an allnex legal entity based in the EEA (EU or Norway) in 2019 or 2020, you can continue to import the material into GB as it is covered by allnex DUIN.

**United States (USA):** All components of this product are designated as "Active" on the TSCA Inventory or are not required to be listed.

This substance may cause: (i) skin irritation. (ii) respiratory complications.

When using this substance: (i) avoid skin contact. (ii) avoid breathing the substance. (iii) avoid ingestion. (iv) use respiratory protection. (v) use skin protection.

This substance may be: (i) toxic to fish; (ii) toxic to aquatic organism.

Notice to users: (i) minimize releases to water.

This product is subject to TSCA 12(b) Export Notification (P16-0255, Tetrabutylammonium bicarbonate; P16-0257, Tetrabutylammonium ethylcarbonate; P16-0258; Tetrabutylammonium propylcarbonate).

This product contains substances subject to the following Significant New Use Rules (SNUR): 40 CFR Section 721.10999; 721.11001; 721.11002.

**Canada:** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**Australia:** This product contains a chemical that is subject to specific information requirements in Australia as set forth by the industrial chemical Bills 2017 (IC Bill).

**New Zealand:** This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** One or more components of this product are NOT included on the Japanese (ENCS and/or ISHL) inventories.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory. When purchased from Allnex Korea or Chemart distributor this product is compliant with the ARECs (the Act on the Registration and Evaluation, etc. of Chemical Substances). All its components are either

excluded, exempt, pre-notified and/or registered. When purchased from another allnex entity, please contact PSRA-KREACH@allnex.com to check the possibility to be covered by our Only Representative.

**Philippines:** One or more components of this product are NOT included on the Philippine (PICCS) inventory.

**Taiwan:** One or more components of this product are NOT included in the Taiwan chemical substance inventory (TCSI).

**Switzerland:** All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 24-26).

## 15.2 CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out.

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## SECTION 16: OTHER INFORMATION

**Reasons for Issue:** Revised Section 12

**Date Prepared:** 18-May-2023

**Date of last significant revision:** 03-Dec-2022

Classification methods include one or more of the following: use of specific product data, read-across data, modeling, professional judgment or a component based evaluation.

### Component - Hazard Statements

#### 1-Propanol

H225 - Highly flammable liquid and vapour.

H318 - Causes serious eye damage.

H336 - May cause drowsiness or dizziness.

#### Tetrabutylammonium hydroxide

H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

#### Ethanol

H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation.

## Emergency phone numbers for other regions

### Asia Pacific

Australia: +61 1800 022 037 (Allnex Australia)

China (PRC): +86(0)532 8388 9090 (NRCC)

India: 000 800 100 7479 (toll free) or +65 3158 1198 (Carechem 24)

Indonesia: 007 803 011 0293 (Carechem 24)

Japan: 0120 015 230 (toll free) (Carechem24)

Korea: +82 2 3479 8401 (Carechem 24)

Malaysia: +60 3 6207 4347 (Carechem 24)

New Zealand: +64 0800 803 002 (Allnex New Zealand)

Philippines: +63 2 231 2149 (Carechem 24)

Taiwan: +886 2 8793 3212 (Carechem 24)

Vietnam: +84 8 4458 2388 (Carechem 24)

All Others: +65 3158 1074 (Carechem 24)

### Latin America

Brazil: +55-800-707-7022 (toll free) or +55-11-98149-0850 (Suatrans 24)

Chile: +56 2 2582 9336 (Carechem 24)

Mexico and all others: +52-555-004-8763 (Carechem 24)

**Canada and USA**

+1-866-928-0789 (toll free) or +1-215-207-0061 (Carechem 24 - Allnex29003-NCEC)

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Prepared By: Product Sustainability & Regulatory Affairs Department, <http://www.allnex.com/contact>

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