

## SAFETY DATA SHEET

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### 1. IDENTIFICATION

**Product Name:** CYCAT® 296-9 Catalyst  
**Synonyms:** None  
**Product Description:** Solution of a phosphoric acid derivative in isobutanol  
**Molecular Formula:** Mixture  
**Molecular Weight:** Mixture, Polymer  
**Intended/Recommended Use:** Catalyst

Allnex USA Inc., 9005 Westside Parkway, Alpharetta, Georgia 30009, USA

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

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

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

See Section 16 for Emergency phone numbers for other regions.

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### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Flammable Liquids Hazard Category 3

Carcinogenicity Hazard Category 2

Germ Cell Mutagenicity Hazard Category 1B

Specific Target Organ Toxicity - Single Exposure Hazard Category 3

Skin Corrosion / Irritation Hazard Category 1B

Serious Eye Damage / Eye Irritation Hazard Category 1

#### LABEL ELEMENTS



#### Signal Word

DANGER

#### Hazard Statements

Flammable liquid and vapor

Suspected of causing cancer

May cause genetic defects

May cause drowsiness or dizziness

May cause respiratory irritation

Causes severe skin burns and eye damage

**Precautionary Statements**

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

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Use only outdoors or in a well-ventilated area.

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

Wash face, hands and any exposed skin thoroughly after handling.

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

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Wash contaminated clothing before reuse.

Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see supplemental first aid instructions on this label).

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

Continue rinsing.

Store in a well-ventilated place. Keep cool.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local and national regulations.

**Hazards Not Otherwise Classified (HNOC), Other Hazards**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS INGREDIENTS**

| Component / CAS No.                       | %      | GHS Classification   |
|---|--------|--|
| Isobutanol<br>78-83-1                     | 49     | Flam. Liq. 3 (H226)<br>STOT SE 3 (H335)<br>STOT SE 3 (H336)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318) |
| Dimethyl acid pyrophosphate<br>26644-00-8 | ~ 27.5 | Skin Corr. 1B (H314)<br>Eye Dam. 1 (H318)  |
| Phosphoric acid<br>7664-38-2              | ~ 1.25 | Met. Corr. 1 (H290)<br>Skin Corr. 1B (H314)<br>Eye Dam. 1 (H318)   |
| Trimethyl phosphate<br>512-56-1           | ~ 0.25 | Carc. 2 (H351)<br>Muta. 1B (H340)<br>Acute tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2A (H319) |

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

## 4. FIRST AID MEASURES

### First-aid Measures

**Inhalation:**

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

**Skin Contact:**

Take off immediately all contaminated clothing. Wear impermeable gloves. Wash immediately with plenty of water and soap. Pay particular attention to skin crevices, nail folds, etc. Do not reuse contaminated clothing without laundering. Do not reuse contaminated leatherware.

**Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention immediately.

**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.

**Most Important Symptoms and Effects, Acute and Delayed**

None known.

**Immediate Medical Attention and Special Treatment**

Not applicable.

**Notes To Physician:**

No specific measures have been identified.

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## 5. FIRE-FIGHTING MEASURES

**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.

**Protective Equipment:**

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See SDS Section 8 (Exposure Controls/Personal Protection).

**Special Hazards:**

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

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

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

**Methods For 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.

**Environmental Precautions:**

None known.

**References to other sections:**

See Sections 7, 8 and 13 for additional information.

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## 7. HANDLING AND STORAGE

### HANDLING

**Precautions:** 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. Wash hands thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Do not breathe vapors or spray mist.

**Special Handling Statements:** Containers must be bonded and grounded when pouring or transferring material.

### STORAGE

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. In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, 60 °C < Flashpoint < 93 °C. Class IIIb Combustible Liquids, Flashpoint > 93 °C.

**Storage Temperature:** Ambient temperature -20 - 90 °F

**Reason:** Safety.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 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 respirators include those certified by NIOSH.

#### 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:

Prevent contamination of skin or clothing when removing protective equipment. 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.

#### Gloves for repeated or prolonged exposure - non exhaustive list:

Polyethylene Nylon (PE), thickness: > 0.062 mm, break through time: > 480 min

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

Nitrile rubber (NBR), thickness: 0.38 mm, break through time: up to 30 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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**Exposure Limit(s)**

**78-83-1 Isobutanol**

|              |  |
|--------------|--|
| OSHA (PEL):  | 100 ppm (TWA)<br>300 mg/m <sup>3</sup> (TWA) |
| ACGIH (TLV): | 50 ppm (TWA)                                 |
| Other Value: | Not established                              |

**7664-38-2 Phosphoric acid**

|              |   |
|--------------|---|
| OSHA (PEL):  | 1 mg/m <sup>3</sup> (TWA)                               |
| ACGIH (TLV): | 3 mg/m <sup>3</sup> (STEL)<br>1 mg/m <sup>3</sup> (TWA) |
| Other Value: | Not established   |

**Biological Exposure Limit(s)**

No values have been established.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

|   |   |
|---|---|
| <b>Color:</b>                                   | colorless                                       |
| <b>Appearance:</b>                              | liquid  |
| <b>Odor:</b>                                    | butanol   |
| <b>Boiling Point:</b>                           | 108 °C 226 °F (value for isobutanol)            |
| <b>Melting Point:</b>                           | Not applicable                                  |
| <b>Vapor Pressure:</b>                          | 10 mm Hg @ 22 °C (value for isobutanol)         |
| <b>Specific Gravity/Density:</b>                | 1.05 g/cm <sup>3</sup>                          |
| <b>Vapor Density:</b>                           | 2.55 (air = 1) (value for isobutyl alcohol)     |
| <b>Percent Volatile (% by wt.):</b>             | ~ 50  |
| <b>pH:</b>                                      | Not applicable                                  |
| <b>Saturation In Air (% By Vol.):</b>           | Not available                                   |
| <b>Evaporation Rate:</b>                        | 0.62 (Butyl acetate = 1) (value for isobutanol) |
| <b>Solubility In Water:</b>                     | Appreciable                                     |
| <b>Volatile Organic Content:</b>                | Not available                                   |
| <b>Flash Point:</b>                             | 36 °C 97 °F Closed Cup                          |
| <b>Flammable Limits (% By Vol):</b>             | Lower: 1.7 Upper: 98 (values for isobutanol)    |
| <b>Autoignition Temperature:</b>                | 427 °C 801 °F (value for isobutanol)            |
| <b>Decomposition Temperature:</b>               | Not available                                   |
| <b>Partition coefficient (n-octanol/water):</b> | Not available                                   |
| <b>Odor Threshold:</b>                          | Not available                                   |
| <b>Viscosity (Kinematic):</b>                   | Not applicable                                  |
| <b>Viscosity (Dynamic):</b>                     | Not available                                   |

**Flammability:** Not available  
**Oxidizing Properties:** Not available

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## 10. STABILITY AND REACTIVITY

**Reactivity:** No information available

**Stability:** Stable.

**Conditions To Avoid:** None known.

**Polymerization:** Will not occur

**Conditions To Avoid:** None known

**Materials To Avoid:** Strong oxidizing agents and alkalies.

**Hazardous Decomposition Products:** Carbon dioxide  
Carbon monoxide (CO)  
oxides of phosphorus

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## 11. TOXICOLOGICAL INFORMATION

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

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

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

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

**Skin corrosion / irritation:** Causes severe skin burns and eye damage.

**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:** Suspected of causing cancer

**Germ cell mutagenicity:** May cause genetic defects

**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. May cause respiratory irritation.

**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 rat Acute LD50 > 2000 mg/kg

|            |        |                 |                                   |
|------------|--------|-----------------|-----------------------------------|
| dermal     | rabbit | Acute LD50      | > 2000 mg/kg                      |
| Inhalation | rat    | Acute LC50 4 hr | > 5 mg/l (Dust/Mist)<br>estimated |

**LOCAL EFFECTS ON SKIN AND EYE**

|                  |        |                       |
|------------------|--------|-----------------------|
| Acute Irritation | dermal | Corrosive             |
| Acute Irritation | eye    | Causes serious damage |

**ALLERGIC SENSITIZATION**

|               |            |         |
|---------------|------------|---------|
| Sensitization | dermal     | No data |
| Sensitization | Inhalation | No data |

**GENOTOXICITY****Assays for Gene Mutations**

|                       |         |
|-----------------------|---------|
| Ames Salmonella Assay | No data |
|-----------------------|---------|

**OTHER INFORMATION**

The product toxicity information above has been estimated.

**HAZARDOUS INGREDIENT TOXICITY DATA**

Isobutanol has acute oral (rat) and dermal (rabbit) LD50 values of 2.46 g/kg and 2.46 - 3.4 g/kg, respectively. The LC50 (rat) following a 4-hour inhalation exposure is >8000 ppm (24.24 mg/L). Acute overexposure to isobutanol vapor can cause irritation to the eyes (severe), skin (moderate), and mucous membranes, as well as, central nervous system depression. Literature reports that acute oral exposure to isobutanol has produced CNS effects in animals. Direct contact with isobutanol may cause severe eye and mild to moderate skin irritation.

A 50% solid solution of dimethyl acid pyrophosphate in butanol is corrosive to the skin and eyes of rabbits. The oral (rat) and dermal (rabbit) LD50 values of this 50% solid solution were 5200 mg/kg and 4300 mg/kg, respectively.

Phosphoric acid has reported acute oral (rat) and acute dermal (rat) LD50 values of 3500 mg/kg and 2740 mg/kg, respectively. Phosphoric acid has an acute 1-hour inhalation LC50 (rat) of greater than 25.5 mg/m<sup>3</sup>. Phosphoric acid causes skin irritation and burns. Phosphoric acid has been reported to cause conjunctivitis and eye burns. Inhalation of acid mist can cause irritation of the lungs, upper respiratory tract, eyes and skin. Phosphoric acid has been reported to cause dermatitis. No genotoxic effects were seen in in vitro studies. No reproductive adverse effects were noted at the highest dose in animal studies. Prenatal toxicity studies on structural analogues have not shown any alerts. Carcinogenicity has not been investigated.

**WARNING:** Cancer – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**12. ECOLOGICAL INFORMATION****TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS**

The ecological assessment for this material is based on an evaluation of its components. This material is not classified as dangerous for the environment.

**RESULTS OF PBT AND vPvB ASSESSMENT**

Not determined

**HAZARDOUS INGREDIENT TOXICITY DATA**

| Component / CAS No.                      | Toxicity to Fish  |
|--|---|
| Isobutanol (78-83-1)                     | LC50 1120 - 1520 mg/L - Oncorhynchus mykiss (96h)<br>LC50 1370 - 1670 mg/L - Pimephales promelas (96h)<br>LC50 1480 - 1730 mg/L - Lepomis macrochirus (96h) |
| Dimethyl acid pyrophosphate (26644-00-8) | Not available   |
| Phosphoric acid (7664-38-2)              | Not available   |
| Trimethyl phosphite (512-56-1)           | LC50 6480 - 7580 mg/L - Pimephales promelas (96h)   |

| Component / CAS No.                      | Toxicity to Water Flea                 |
|--|--|
| Isobutanol (78-83-1)                     | EC50 = 1300 mg/L - Daphnia magna (48h) |
| Dimethyl acid pyrophosphate (26644-00-8) | Not available                          |
| Phosphoric acid (7664-38-2)              | Not available                          |
| Trimethyl phosphite (512-56-1)           | Not available                          |

| Component / CAS No.                      | Toxicity to Algae |
|--|-------------------|
| Isobutanol (78-83-1)                     | Not available     |
| Dimethyl acid pyrophosphate (26644-00-8) | Not available     |
| Phosphoric acid (7664-38-2)              | Not available     |
| Trimethyl phosphite (512-56-1)           | Not available     |

| Component / CAS No.                      | Partition coefficient |
|--|-----------------------|
| Isobutanol (78-83-1)                     | 1                     |
| Dimethyl acid pyrophosphate (26644-00-8) | Not available         |
| Phosphoric acid (7664-38-2)              | -0.9                  |
| Trimethyl phosphite (512-56-1)           | Not available         |

**13. DISPOSAL CONSIDERATIONS**

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this SDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.



## 14. TRANSPORT INFORMATION

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

### US DOT

Dangerous Goods? X

PROPER SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

Hazard Class: 8

Subsidiary Class: 3

Packing Group: II

UN/ID Number: UN2920

Transport Label Required: Corrosive  
Flammable Liquid

TECHNICAL NAME (N.O.S.): ISOBUTANOL, DIMETHYL ACID PYROPHOSPHATE

| <u>Component / CAS No.</u> | <u>Hazardous Substances/Reportable Quantity of Product (lbs)</u> |
|----------------------------|--|
| Isobutanol                 | 9803   |

Comments: Hazardous Substances/Reportable Quantities - DOT requirements specific to Hazardous Substances only apply if the quantity in one package equals or exceeds the product reportable quantity.

### TRANSPORT CANADA

Dangerous Goods? X

PROPER SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

Hazard Class: 8

Subsidiary Class: 3

Packing Group: II

UN Number: UN2920

Transport Label Required: Corrosive  
Flammable Liquid

TECHNICAL NAME (N.O.S.): ISOBUTANOL, DIMETHYL ACID PYROPHOSPHATE

### ICAO / IATA

Dangerous Goods? X

UN PROPER SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

Transport Hazard Class: 8

Subsidiary Class: 3

Packing Group: II

UN Number: UN2920

Transport Label Required: Corrosive  
Flammable Liquid

TECHNICAL NAME (N.O.S.): ISOBUTANOL, DIMETHYL ACID PYROPHOSPHATE

### IMO

Dangerous Goods? X

UN PROPER SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S.

Transport Hazard Class: 8

Subsidiary Class: 3

UN Number: UN2920

Packing Group: II

Transport Label Required: Corrosive  
Flammable Liquid

TECHNICAL NAME (N.O.S.): ISOBUTANOL, DIMETHYL ACID PYROPHOSPHATE

### SPECIAL PRECAUTIONS FOR USER

Protect against external heat sources higher than +50°C/122°F.

## 15. REGULATORY INFORMATION

### Inventory Information

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

**Canada:** One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL). These components are included on the Canadian Non-Domestic Substances List (NDSL).

**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.

**Australia:** One or more components of this product have NOT yet been included in the Australian Inventory of Industrial Chemicals (AIIC) or assessed by AICIS.

**New Zealand:** This product is NOT approved under the Hazardous Substances and New Organisms (HSNO) Act.

**China:** One or more components of this product are NOT included on the Chinese (IECSC) inventory.

**Japan:** All components of this product are included on the Japanese (ENCS and ISHL) inventories or are not required to be listed on the Japanese inventories.

**Korea:** One or more components of this product are NOT included on the Korean (ECL) inventory.

**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).

### OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

| Component / CAS No.   | %  | TPQ (lbs) | RQ(lbs) | S313 | TSCA 12B |
|-----------------------|----|-----------|---------|------|----------|
| Isobutanol<br>78-83-1 | 50 | None      | 5000    | No   | No       |

### PRODUCT HAZARD CATEGORY UNDER SECTIONS 311 AND 312 OF EPCRA

#### Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

#### Health Hazards

Carcinogenicity

Skin Corrosion or Irritation

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)  
Germ cell mutagenicity

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## 16. OTHER INFORMATION

### NFPA Hazard Rating (National Fire Protection Association)

Health: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

Fire: 3 - Liquids and solids that can be ignited under almost all ambient temperature conditions.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

**Reasons for Issue:** Revised Section 2  
Revised Section 3  
Revised Section 11  
Revised Section 15

**Date Prepared:** 08/11/2022

**Date of last significant revision:** 08/11/2022

### Component - Hazard Statements

Isobutanol

H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

Dimethyl acid pyrophosphate

H314 - Causes severe skin burns and eye damage.

Phosphoric acid

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

Trimethyl phosphate

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H340 - May cause genetic defects.

H351 - Suspected of causing cancer.

### 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) (Carechem 24)

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)

#### Europe

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

#### Middle East, Africa

+44 (0) 1235 239 671 (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)

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

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