

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

**Product Code** 21031  
**Product Name** Purify 100

**Other means of identification**

**Recommended use of the chemical and restrictions on use**

Use only for the purpose on the product label.

**Details of the supplier of the safety data sheet**

**Manufacturer / Manufactured For**

Purify  
1707 Townhurst Drive  
Houston, TX 77043  
1-713-463-1929

**Emergency telephone number**

**24 Hour Emergency Phone Number:** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 2

**Label elements**

**Emergency Overview**

**Danger**

**Hazard statements**

Causes severe skin burns and eye damage  
May cause respiratory irritation. May cause drowsiness or dizziness  
Toxic to aquatic life



**Appearance** Clear, Colorless

**Physical state** Liquid

**Odor** No Information available

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

**Precautionary Statements - Response**

Specific Treatment (See Section 4 on the SDS).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

#### Precautionary Statements - Storage

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

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

#### Hazards not otherwise classified (HNOC)

##### Other Information

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Monosodium Phosphate Anhydrous	7558-80-7	7-13	*
Zinc Chloride	7646-85-7	5-10	*
Phosphoric Acid	7664-38-2	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### First aid measures

##### General advice

Immediate medical attention is required.

##### Skin Contact

Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. For minor skin contact, avoid spreading material on unaffected skin. For severe burns, immediate medical attention is required.

##### Eye contact

Immediate medical attention is required. 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. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

##### Inhalation

Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

##### Ingestion

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

##### Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

##### Symptoms

No Information available.

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

##### Note to physicians

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

### **Specific hazards arising from the chemical**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

### **Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### **Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

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

#### **Personal precautions**

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

#### **Environmental precautions**

#### **Environmental precautions**

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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

#### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

Dilute spill with sodium bicarbonate to pH greater than 6.0. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling**

#### **Advice on safe handling**

Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Always add acid to water.

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

#### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

#### **Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc Chloride 7646-85-7	STEL: 2 mg/m <sup>3</sup> fume TWA: 1 mg/m <sup>3</sup> fume	TWA: 1 mg/m <sup>3</sup> fume (vacated) TWA: 1 mg/m <sup>3</sup> fume (vacated) STEL: 2 mg/m <sup>3</sup> fume	IDLH: 50 mg/m <sup>3</sup> fume TWA: 1 mg/m <sup>3</sup> fume STEL: 2 mg/m <sup>3</sup> fume
Phosphoric Acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls****Engineering Controls**

Showers, Eyewash stations & Ventilation systems.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tight sealing safety goggles. Face protection shield.

**Skin and body protection**

Wear chemical resistant gloves.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear, Colorless
<b>Odor</b>	No Information available
<b>Odor threshold</b>	No Information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1.0 -2.0	
Specific Gravity	1.408	
Viscosity	No Information available	Remarks
Melting point/freezing point	No Information available	
Boiling point / boiling range	No Information available	
Flash point		
Evaporation rate	No Information available	
Flammability (solid, gas)	No Information available	
Upper flammability limit:	No Information available	
Lower flammability limit:	No Information available	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Soluble in water	
Partition Coefficient (n-octanol/water)	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

**Other Information**

Density Lbs/Gal No Information available  
 VOC Content (%) No Information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.

**Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	The primary effects and toxicity of this material are due to its corrosive nature.
<b>Inhalation</b>	Causes burns.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin Contact</b>	The product causes burns of eyes, skin and mucous membranes.
<b>Ingestion</b>	Causes burns.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Zinc Chloride 7646-85-7	= 1100 mg/kg ( Rat )	-	<= 1975 mg/m <sup>3</sup> ( Rat ) 10 min
Phosphoric Acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2740 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h

**Information on toxicological effects**

**Symptoms** No Information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Corrosivity</b>	Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to eyes.
<b>Sensitization</b>	No Information available.
<b>Germ cell mutagenicity</b>	No Information available.
<b>Carcinogenicity</b>	No Information available.
<b>Reproductive toxicity</b>	No Information available.
<b>STOT - single exposure</b>	No Information available.
<b>STOT - repeated exposure</b>	No Information available.
<b>Chronic toxicity</b>	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.

**Target organ effects** Central Vascular System (CVS), EYES, Respiratory system, Skin.  
**Aspiration hazard** No Information available.

#### Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity.  
 The following values are calculated based on chapter 3.1 of the GHS document .

### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

#### Persistence and degradability

No Information available.

#### Bioaccumulation

No Information available.

#### Other adverse effects

No Information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D002

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Zinc Chloride 7646-85-7	Toxic Corrosive
Phosphoric Acid 7664-38-2	Corrosive

### 14. TRANSPORT INFORMATION

The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under 49 CFR, IATA and IMDG to assure regulatory compliance.

#### DOT

**DOT Proper Shipping name** UN1760, Corrosive Liquid, n.o.s. (contains Zinc Chloride and Phosphoric Acid), 8, PG III

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory.

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List.

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	SARA 313 - Threshold Values %
Zinc Chloride - 7646-85-7	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc Chloride 7646-85-7	1000 lb	X	-	X
Phosphoric Acid 7664-38-2	5000 lb	-	-	X

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Zinc Chloride 7646-85-7	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
Phosphoric Acid 7664-38-2	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc Chloride 7646-85-7	X	X	X
Phosphoric Acid 7664-38-2	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not Applicable

**16. OTHER INFORMATION**

**HMIS** Health hazards 3 Flammability 0 Physical hazards 0 Personal protection X

**Legend**

**N/A** - Not Applicable  
**N/E** - Not Established  
**N/D** - Not Determined  
**N/K** - Not Known

**Revision Date** 22-Jul-2021  
**Revision Note** No Information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**