



# SAFETY DATA SHEET

## ZL98 HIGH PURITY PLASTIC SAFE CONTACT CLEANER

Conforms to GHS Version 4.0 2024 HazCom Revisions

Print Date: 03-Oct-2024

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Version 3

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** ZL98 High Purity Plastic Safe Contact Cleaner

**Other means of identification**

**Synonyms** none

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

**Uses advised against** No information available

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

**Supplier Address**

Zircon Industries Incorporated  
4920 Commerce Parkway #9  
Cleveland, OH 44128  
216-595-0200

**E-mail address**

staff@liquidheat.com

**Emergency telephone number**

**Emergency Telephone** InfoTrac 1-800-535-5053

### 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin Corrosion / Irritation	Category 2
Serious Eye Damage/Irritation	Category 2
Highly Flammable Liquid and Vapor	Category 2
Gasses Under Pressure	Compressed Gas
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

**Hazards Not Otherwise Classified (HNOC)**

May be harmful if swallowed

**Label elements**

Emergency Overview

**DANGER**



**Hazard statements**

Harmful in contact with skin  
 Causes skin irritation  
 Causes serious eye irritation  
 Highly Flammable Liquid and Vapor  
 May cause respiratory irritation.  
 May cause drowsiness or dizziness  
 May cause damage to organs through prolonged or repeated exposure  
 Contains gas under pressure; may explode if heated

Skin Sensitizer – Category 2

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear eye/face protection  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF EXPOSED or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store in well-ventilated area

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not Applicable

Unknown Acute Toxicity                      0% of the substance or mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS No.	Weight-%	Trade Secret
1-Bromopropane	106-94-5	80-95	*
Difluoroethane	75-37-6	1-10	*

\*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.

##### Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.

##### Skin Contact

Wash off immediately with soap and plenty of water.

##### Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

##### Ingestion

Rinse mouth. Get medical attention if symptoms occur.

##### 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

Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical, CO2 or water spray.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

##### 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. Keep people away from and upwind of spill/leak.

##### Environmental precautions

##### Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

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

##### Methods for containment

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

##### Methods for cleaning up

Cover liquid spill with sand, earth or other non-combustible absorbent material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on safe handling Conditions for safe storage, including any incompatibilities</b>	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
<b>Storage Conditions</b>	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.
<b>Incompatible materials</b>	None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

n-propyl bromide 106-94-5	ACGIH TLV	0.1ppm
<i>NIOSH IDLH Immediately Dangerous to Life or Health</i>		

### Appropriate engineering controls

<b>Engineering Controls</b>	Showers Eyewash stations Ventilation systems.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Safety Glasses with Side Shields.
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	aerosol	<b>Odor threshold</b>	No information available
<b>Appearance</b>	clear	<b>Odor</b>	Mild
<b>Color</b>	colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No information available
Melting point/freezing point		No information available
Boiling point / boiling range		No information available
Flash point	>250F	
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:		No information available
Lower flammability limit:		No information available
Vapor pressure	<2mm/hg	
Vapor density		
Water solubility	Insoluble	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties		No information available
Oxidizing properties		No information available

### Other Information

<b>Explosion severity</b>		
Danger of Explosion, cloud		No information available
Minimum Ignition Energy, Cloud, mJ		No information available
KST, (cloud), bar.m.s-1		No information available
Pmax maximum explosion pressure, Cloud, bar		No information available
VMP, (cloud), bar.s-1		No information available
LOC Limiting Oxygen Concentration, Cloud, %v/v O2		No information available
<b>Softening point</b>		No information available
<b>Molecular weight</b>		No information available
<b>Density</b>		No information available
<b>Bulk density</b>		No information available
<b>Specific Gravity</b>	1.18@ 25C	

## 10. STABILITY AND REACTIVITY

### Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

### Chemical Stability

Material is stable under normal conditions.

### Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### Conditions to avoid

Contact with incompatible materials.

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

No hazardous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	Causes serious eye damage.	
<b>LD 50 106-94-5</b>		
<b>1-Bromopropane</b>	Rat (oral)	3600mg/kg
	Rat (inhalation)	253 g/m3
<b>Inhalation</b>	Is a respiratory sensitizer.	
<b>Eye contact</b>	Causes eye damage/irritation.	
<b>Skin Contact</b>	Causes skin damage/irritation	
<b>Ingestion</b>	Can be harmful if swallowed.	

### Information on toxicological effects

**Symptoms** No information available.

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

#### Sensitization

**Germ cell mutagenicity** .

**Carcinogenicity** No information or data specific to the product on this toxicological (health) effect is available.

**Reproductive toxicity** .

**STOT - single exposure** Category 3.

**STOT - repeated exposure** Category 2.

**Target Organ Effects** Central nervous system, Eyes.

**Aspiration hazard** Can be harmful if swallowed.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Not toxic to aquatic life**

**1-Bromopropane 106-94-5**

**Fish**

**67.3: 96 h Pimephales promelas mg/L LC50**

### 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.

## 14. TRANSPORT INFORMATION

Based on package size, product may be eligible for limited quantity exception.

**DOT Proper Shipping Name:** Aerosols (flammable)

**IMDG** Aerosols (flammable) - MARINE POLLUTANT

**IATA:** Aerosols (flammable)

**DOT, IMDG, IATA Primary Hazard Class:** 2.2

**DOT, IMDG, IATA Packing Group:** III

**UN Number** . UN 1950

## 15. REGULATORY INFORMATION

### International Inventories

<b>AICS</b>	Yes
<b>DSL</b>	Yes
<b>NDSL</b>	No
<b>IECSC</b>	Yes
<b>EINECS</b>	Yes
<b>ELINCS</b>	No
<b>ENCS</b>	Yes
<b>KECL</b>	No
<b>PICCS</b>	Yes
<b>TSCA</b>	Yes (Registered Lautenberg 21st act)
<b>NZIoC</b>	Yes

### Legend:

**AICS** - Australian Inventory of Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

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

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

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

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

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**NZIoC** - New Zealand Inventory of Chemicals

**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

<b>Chemical Name</b>	<b>SARA 313 - Threshold Values %</b>
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**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	Yes
<b>Sudden release of pressure hazard</b>	Yes
<b>Reactive Hazard</b>	No

**CERCLA**

This material, as supplied, contains no substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**SARA 311/312 Hazardous**

Yes

**Classified hazard categories**

Eye Damage or Irritation, skin damage or irritation  
Sensitizer

**California Prop 65**

1-Bromopropane 106-94-5 Developmental Female  
Reproductive Male Reproductive

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	Health hazards 2	Flammability 3	Instability 0	<b>Physical and Chemical Properties -</b>
<b><u>HMIS</u></b>	Health hazards 2*	Flammability 3	Physical hazards 0	<b>Personal protection B</b>

**Revision Date** 03-Oct-2024

**Revision Note**

[SDS sections updated \(\\*\\*\\*\) GHS 4.0 2024](#)

**Disclaimer**

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**End of Safety Data Sheet**