



SAFETY DATA SHEET

ZL98 HIGH PURITY PLASTIC SAFE CONTACT CLEANER

Conforms to GHS Version 7.0 2026 HazCom Revisions

Print Date: 25-Mar-2026

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Version 4

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
PO Box 24208
Cleveland, OH 44124-9998
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

H315: Causes Skin Irritation
H223: Extremely Flammable Aerosol
H304: May be fatal if swallowed and enters airway
H319: Causes eye damage/ irritation
H280: Contains Gas Under Pressure; may explode if heated
H373: May cause damage to organs through prolonged or repeated exposure

Precautionary Statements - Prevention

P301+P316: IF SWALLOWED: Get emergency medical help immediately..
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P332+P317: If skin irritation occurs: Get medical help.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
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.
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/vapors/spray
P272: Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

P308+P316: IF EXPOSED or concerned: Get medical advice/attention
P305+P354+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P302+P352: IF ON SKIN: Wash with plenty of soap and water
P332+P317: If skin irritation or rash occurs: Get medical advice/attention
P301+P316: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Storage

P403: Store in well-ventilated area
P412: Do not expose to temperatures above 50C / 122F

Precautionary Statements - Disposal

P501: 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

Advice on safe handling
Conditions for safe storage, including any incompatibilities

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

Storage Conditions

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

Incompatible materials

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**

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls

Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety Glasses with Side Shields.

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory protection

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.

General Hygiene Considerations

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

Physical state	aerosol	Odor threshold	No information available
Appearance	clear	Odor	Mild
Color	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
<u>Other Information</u>		
Explosion severity		
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
Softening point		No information available
Molecular weight		No information available
Density		No information available
Bulk density		No information available
Specific Gravity	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

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

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

Chemical Name	SARA 313 - Threshold Values %
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SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	Yes
Reactive Hazard	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

Classified hazard categories

Yes
 Eye Damage or Irritation, skin damage or irritation
 Sensitizer
 1-Bromopropane 106-94-5 Developmental Female
 Reproductive Male Reproductive

California Prop 65

16. OTHER INFORMATION

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

Revision Date 25-Mar-2026

Revision Note

[SDS sections updated \(***\) GHS 7.0 2026](#)

Disclaimer

The information provided above is intended as a guide to assist in the safe handling, use, processing, storage, transportation, disposal and release of the material listed. Nothing contained herein is to be considered as an express or implied warranty of performance or quality. The information relates only to the specific material designated and may not be applicable when such material is used in combination with any other materials or as part of any process, except as otherwise expressly described herein. The information is believed to be true and correct as of the date issued. Always make sure you are using the most current information available. The material described herein is produced for commercial and industrial use only and unless otherwise specifically designated by the manufacturer in writing has not received any specific regulatory approval such as approvals for food contact or for use in medical/surgical applications or devices. It is buyer and user's sole and exclusive responsibility to ensure that any handling, use, processing, storage, transportation, disposal and release of the material complies with all applicable laws, rules and regulations.

End of Safety Data Sheet