



SAFETY DATA SHEET

ZIRCON ZL-98- HP CONTACT CLEANER

Print Date: 21-May-2019

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Version 2

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

Product identifier

Product Name Zircon ZL-98-HP 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
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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	47-84	*
Difluoroethane	75-37-6	16-29	*

*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
<i>NIOSH IDLH Immediately Dangerous to Life or Health</i>		

Appropriate engineering controls

Engineering Controls	Showers Eyewash stations Ventilation systems.
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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

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

Revision Date 20-Apr-2019

Revision Note

[SDS sections updated \(***\) GHS Revision](#)

Disclaimer

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End of Safety Data Sheet