

# Safety Data Sheet

## LD-93



### 1. Identification

<b>Product identifier</b>	LD-93
<b>Product code</b>	AELD93425GDZ
<b>Other means of identification</b>	N.Av.
<b>Recommended use of the chemical and restrictions on use</b>	Non conductive lubricant. Not recommended for any other use not detailed on product data sheet or label.
<b>Manufacturer</b>	AEROCHEM Inc. 5977 Trans Canada Highway Pointe-Claire, QC H9R 1C1 Canada  General Information: 1-888-592-5837  <a href="http://www.aerochem.ca">www.aerochem.ca</a> <a href="mailto:info@aerochem.ca">info@aerochem.ca</a>
<b>Emergency phone number</b>	INFOTRAC®: 1-800-535-5053 International call collect: 1-352-323-3500 24 hours/day, 7 days/week

### 2. Hazard identification

<b>Summary</b>	Non-flammable aerosol. Content under pressure, containers may explode under fire conditions. Keep away from heat and open flame. Do not breathe vapours, mists or aerosols. Avoid contact with skin, eyes and clothing. If medical advice is needed, have this SDS or label at hand. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.
----------------	---

#### WHMIS 2015/GHS/OSHA HCS 2012



Reproductive toxicity (Category 2)  
Aspiration hazard (Category 1)

#### DANGER

H229: Pressurized container: may burst if heated  
H304: May be fatal if swallowed and enters airways  
H361F: Suspected of damaging fertility  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.  
P251: Do not pierce or burn, even after use.  
P280: Wear gloves and eye protection.  
P308+313: IF exposed or concerned: Get medical attention.  
P301+310+331: IF SWALLOWED: Immediately call a POISON CENTER or a physician. Do NOT induce vomiting.  
P405: Store locked up.  
P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
P501: Dispose of contents and container in accordance with local regulations.

**Other hazards which do not result in classification**

Flammable aerosols (Category 3).

### 3. Composition/information on ingredients

Common name	CAS	Weight % content
White mineral oil	8042-47-5	80 - 100 %
Octamethylcyclotetrasiloxane	556-67-2	3 - 10 %
Dipropylene glycol methyl ether	34590-94-8	3 - 10 %
Carbon dioxide	124-38-9	1 - 5 %
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	0.1 - 1 %
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	0.1 - 1 %

**Note:** The manufacturer withholds the actual concentration range of the ingredients as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
<b>Skin contact</b>	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.
<b>Eye contact</b>	IMMEDIATELY flush with plenty of water. Remove contact lenses if easy to do. Flush with water for at least 15 minutes. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
<b>Ingestion</b>	DO NOT induce vomiting, unless recommended by medical personnel. If victim is conscious wash out mouth with plenty of water. Never give anything by mouth if victim is unconscious or convulsing. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
<b>Other</b>	No information available.
<b>Symptoms</b>	May cause temporary eyes irritation. Prolonged and repeated contact may cause skin dryness and irritation. Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discolouration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.
<b>Notes to the physician</b>	If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Dry chemicals, water spray, chemical foam, carbon dioxide (CO <sub>2</sub> ).
<b>Specific hazards arising from the chemical</b>	Non-flammable aerosol. Content under pressure, containers may explode under fire conditions. The deflagration density is 1535 g/m <sup>3</sup> (Aerosol spray enclosed space).
<b>Special protective equipment</b>	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
<b>Special protective actions for fire-fighters</b>	Use water spray to cool fire-exposed containers.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
<b>Environmental precautions</b>	For a large spill, consult the Department of Environment or the relevant authorities.
<b>Methods and materials for containment and cleaning up</b>	Ventilate the area well. Allow propellant gas to evaporate. Absorb with inert material (soil, sand, vermiculite) or wipe with a cloth and place in an appropriate waste disposal container clearly identified. Finish cleaning the contaminated surface by rinsing with soapy water.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Content under pressure, do not puncture, cut, heat or throw container into the flames. Keep away from heat and open flame. Use only in well ventilated area. Do not breathe vapours, mists or aerosols. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash before reuse.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated area. Store away from oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat.
<b>Storage temperature</b>	<49°C (120.2°F)

## 8. Exposure controls/personal protection

<b>Immediately Dangerous to Life or Health</b>	No IDLH value is reported.			
White mineral oil	STEL	Mist	10 mg/m <sup>3</sup>	RSST
	TWA (8h)	Mist	1 mg/m <sup>3</sup>	BC
		Fume	2 mg/m <sup>3</sup>	ACGIH
		Mist	5 mg/m <sup>3</sup>	ACGIH , ON, RSST
Octamethylcyclotetrasiloxane	TWA (8h)	10 ppm		US AIHA
Dipropylene glycol methyl ether	STEL	150 ppm		ACGIH , BC, ON
		150 ppm	909 mg/m <sup>3</sup>	RSST (Pc)
	TWA (8h)	100 ppm		ACGIH , BC, ON
		100 ppm	606 mg/m <sup>3</sup>	RSST (Pc)
Carbon dioxide	STEL	15000 ppm		BC
		30000 ppm	54000 mg/m <sup>3</sup>	ACGIH , ON, RSST
	TWA (8h)	5000 ppm		BC
		5000 ppm	9000 mg/m <sup>3</sup>	ACGIH , ON, RSST
Distillates (petroleum), hydrotreated light naphthenic	TWA (8h)	Mist	5 mg/m <sup>3</sup>	ACGIH , OSHA, RSST
Distillates (petroleum), hydrotreated heavy paraffinic	TWA (8h)	Mist	1 mg/m <sup>3</sup>	BC
		Mist	5 mg/m <sup>3</sup>	ACGIH , ON, RSST
<b>Appropriate engineering controls</b>	Provide sufficient mechanical ventilation (general or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits.			

Individual protection measures	
<b>Eye</b>	No measures will be necessary. If there is a risk of contact with eyes, wear chemical splash goggles.
<b>Hands</b>	Wear nitrile or neoprene gloves. Disposable nitrile gloves can also be used, but discard after single use. To avoid frostbite, wear gloves suitable to the hazards.
<b>Skin</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code.
<b>Respiratory</b>	Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA.
<b>Feet</b>	No personal protection measure required.
 Safety glasses    Nitrile gloves	

## 9. Physical and chemical properties

<b>Physical state</b>	Aerosol (liquid)	<b>Flammability</b>	Non-flammable
<b>Colour</b>	Colourless	<b>Flammability limits</b>	N/Av.
<b>Odour</b>	Slight odor	<b>Flash point</b>	155 °C (311 °F)
<b>Odour threshold</b>	N/Av.	<b>Auto-ignition temperature</b>	N/Av.
<b>pH</b>	N/Av.	<b>Sensibility to electrostatic charges</b>	N/Av.
<b>Melting point</b>	-60 °C (-76 °F)	<b>Sensibility to sparks and/or friction</b>	No
<b>Freezing point</b>	-60 °C (-76 °F)	<b>Vapour density</b>	N/Av. (Air = 1)
<b>Boiling point</b>	N/Av.	<b>Relative density</b>	0.72.85 kg/L (Water = 1)
<b>Solubility</b>	Negligible in water	<b>Partition coefficient n-octanol/water</b>	N/Av.
<b>Evaporation rate</b>	N/Av.	<b>Decomposition temperature</b>	N/Av.
<b>Vapour pressure</b>	N/Av.	<b>Viscosity</b>	<20.5 cSt @ 40 °C (104 °F)
<b>Percent Volatile</b>	N/Av.	<b>Molecular mass</b>	N/Av.
N/Av.: Not Available    N/Av.: Not Applicable    Und.: Undetermined    N/E: Not Established			

## 10. Stability and reactivity

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under recommended storage conditions. Aerosol containers are unstable at temperatures above 49 °C.
	A dangerous reaction will not occur.

<b>Possibility of hazardous reactions (including polymerizations)</b>	
<b>Conditions to avoid</b>	Avoid temperatures over 49 °C. Avoid contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents (e.g. chlorine, fluorine, nitric acid, perchloric acid, peroxides, nitrates, chlorates, chromates, permanganates and perchlorates).
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

<b>Numerical measures of toxicity</b>	<p>White mineral oil</p> <p>Dipropylene glycol methyl ether</p> <p>Octamethylcyclotetrasiloxane</p> <p>Carbon dioxide</p> <p>Distillates (petroleum), hydrotreated light naphthenic</p> <p>Distillates (petroleum), hydrotreated heavy paraffinic</p>	<p>Ingestion &gt;2460 mg/kg Rat LD50</p> <p>Inhalation &gt;2.46 mg/l/4h Rat LC50</p> <p>Skin &gt;2000 mg/kg Rabbit LD50</p> <p>Ingestion 5250 mg/kg Rat LD50</p> <p>Skin 9500 mg/kg Rabbit LD50</p> <p>Ingestion &gt;4800 mg/kg Rat LD50</p> <p>1700 mg/kg Mouse LD50</p> <p>Inhalation 36 mg/l/4h Rat LC50</p> <p>Skin &gt;2500 mg/kg Rat LD50</p> <p>Ingestion 820000 ppm/4h Rat LC50</p> <p>Inhalation 200000 ppm/2h Mouse LC50</p> <p>Ingestion &gt;5000 mg/kg Rat LD50</p> <p>Inhalation &gt;5 mg/l/4h Rat LC50</p> <p>Skin &gt;5000 mg/kg Rabbit LD50</p> <p>Ingestion &gt;15000 mg/kg Rat LD50</p> <p>Inhalation &gt;5 mg/l/4h Rat LC50</p> <p>Skin &gt;5000 mg/kg Rabbit LD50</p>
<b>Likely routes of exposure</b>	Skin, eyes, inhalation, ingestion.	
<b>Delayed, immediate and chronic effects</b>	<p><b>Eye contact</b> May cause temporary eyes irritation. Eye Irritation/Corrosion, Rabbit (OECD TG 405): tests performed with each ingredient of this mixture gave not irritating to slightly irritating results.</p> <p><b>Skin contact</b> Prolonged and repeated contact may cause skin dryness and irritation. Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with each ingredient of this mixture gave not irritating results.</p> <p><b>Inhalation</b> In the workplace, the product is rapidly absorbed by respiratory tract. Prolonged or excessive exposure may cause headache, drowsiness, nausea, dizziness, respiratory tract irritation. The severity of symptoms may vary depending on exposure conditions.</p> <p><b>Ingestion</b> Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discolouration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.</p> <p><b>Respiratory or skin sensitization</b> Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers.</p> <p><b>IARC/NTP Classification</b></p> <p><b>Common name</b> Dipropylene glycol methyl ether</p> <p><b>IARC NTP</b> - -</p> <p><small>IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic. NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens.</small></p> <p><b>Carcinogenicity</b> Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.</p> <p><b>Mutagenicity</b> Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.</p> <p><b>Reproductive toxicity</b> Octamethylcyclotetrasiloxane (CAS no 556-67-2) inhalation test has shown some evidence of adverse effects on sexual function and fertility, based on animal experiments (OECD Guideline 416).</p>	

	<p><b>Specific target organ toxicity - single exposure</b> No target organ is listed.</p> <p><b>Specific target organ toxicity - repeated exposure</b> No target organ is listed.</p>
<b>Interactive effects</b>	No information available.
<b>Other information</b>	The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. The acute toxicity estimates (ATE) by inhalation of the mixture were calculated to be greater than 20 mg/L/4h for vapours and to be greater than 5 mg/L/4h for the aerosols and mists. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.

## 12. Ecological information

<b>Ecological toxicity</b>	<p>Fish - Oncorhynchus mykiss - Rainbow trout LC50 &gt;100 mg/L; 96h (CAS no 8042-47-5) OECD 203</p> <p>Aquatic Invertebrate - Daphnia Magna (static) EC50 &gt;100 mg/L; 48h (CAS no 8042-47-5) OECD 202</p> <p>Algae, Pseudokirchneriella subcapitata EC50 &lt;100 mg/L; 72h (CAS no 8042-47-5) OECD 201</p> <p>Fish - Oncorhynchus mykiss - Rainbow trout LC50 →0.022 mg/L; 96h (CAS no 556-67-2)</p> <p>Fish - Pimephales promelas - Fresh water LC50 &gt;1000 mg/L; 96h (CAS no 34590-94-8) OECD 203</p> <p>Aquatic Invertebrate - Crustaceans, Daphnia Magna EC50 1920 mg/L; 48h (CAS no 34590-94-8) OECD 202</p>
<b>Persistence</b>	Contains an or many ingredients that may be persistent in the environment.
<b>Degradability</b>	The product is a mixture of which some ingredients are readily biodegradable (> 60% in 28 days) while other ingredients are not readily biodegradable (<60% in 28 days).
<b>Bioaccumulative potential</b>	The product is a mixture of which some ingredients have a low bioaccumulation potential (Log Kow of <3 and / or BCF <500) while other ingredients have some potential to bioaccumulate (Log Kow of >3 and / or BCF >500).
<b>Mobility in soil</b>	The product is a mixture of which some ingredients evaporate very easily from the surface of the soil. Moreover, ingredients have very high to moderate mobility in soil.
<b>Other adverse effects</b>	Tetrafluoroethane (CAS no 811-97-2) does not deplete the ozone layer, but it does have a high global warming potential.

## 13. Disposal considerations

<p><b>Container</b></p> 	<p>Important! Prevent waste generation. Use in full. DO NOT pierce, cut, heat, or burn the container, even after use. Depressurize empty container (empty it of its propellant). Dispose of empty container as household waste. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.</p>
--	--

## 14. Transport information

<b>UN Number</b>	UN 1950
<b>UN Proper Shipping Name</b>	AEROSOLS, NON-FLAMMABLE
<b>Environmental hazards</b>	This material does not contain marine pollutant.



- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

### California Proposition 65

No ingredients listed.

<b>Other regulations</b>	
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p><b>HMIS</b></p> <p>① Health ① Flammability ① Reactivity ① Protective Equipment</p> </div> <div style="text-align: center;"> <p><b>NFPA</b></p> </div> </div>

## 16. Other information

<b>Date (YYYY-MM-DD)</b>	AEROCHEM Inc. 2020-03-03
<b>Version</b>	03
<b>Other information</b>	<p>REFERENCES:</p> <ul style="list-style-type: none"> <li>- Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, <a href="https://haz-map.com/">https://haz-map.com/</a></li> <li>- Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), <a href="http://www.reptox.csst.qc.ca">http://www.reptox.csst.qc.ca</a></li> <li>- Database, Institut National de Recherche et de Sécurité, <a href="http://www.inrs.fr/accueil/produits/bdd.html">http://www.inrs.fr/accueil/produits/bdd.html</a></li> <li>- The National Center for Biotechnology Information, National Institutes of Health (NIH), U.S. National Library of Medicine, <a href="https://pubchem.ncbi.nlm.nih.gov/">https://pubchem.ncbi.nlm.nih.gov/</a></li> </ul> <p>DATE OF FIRST VERSION OF SDS: 2017-09-18.</p> <p>CHANGES MADE IN THE VERSION 02: section 3.</p> <p>DATE OF SECOND VERSION OF SDS: 2019-07-31.</p> <p>CHANGES MADE IN THE VERSION 03: section 1.</p> <p>ACGIH: American Conference of Governmental Industrial Hygienists          AIHA: American Industrial Hygiene Association          HMIS: Hazardous Materials Identification System          NFPA: National Fire Protection Association          OSHA: Occupational Safety and Health Administration (USA)          NIOSH: National Institute for Occupational Safety and Health          NTP: National Toxicology Program          RSST: Règlement sur la santé et la sécurité du travail (Québec)          GHS: Globally Harmonized System          IARC: International Agency for Research on Cancer          IDLH: Immediately Dangerous to Life or Health          STEL: Short Term Exposure Limit (15 min)          TWA: Time Weighted Averages          WHMIS: Workplace Hazardous Materials Information System</p>

Powered by



A global vision of prevention

To the best of our knowledge, the information contained herein is accurate. However, neither Preventis System nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

TM/MD

