




Clear Drive

SAFETY DATA SHEET

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	
Product Name	Clear Drive
Identity CAS	Calcium chloride +proprietary corrosion inhibitor
No. EINECS	Mixture.
No.	None assigned.
REACH Registration No.	None assigned.
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified use(s)	Corrosion inhibited deicer.
Uses advised against	None known.
1.3 Details of the supplier of the Safety Data Sheet	
Company Identification	Great Lakes Chloride, Inc. 895 E 200 N Warsaw, IN 46582 USA
Telephone	(574) 267-2286
Fax	(574) 267-2235
E-Mail (competent person)	cleardrive@glchloride.com
1.4 Emergency telephone number	1-877-445-2604

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
GHS	Causes skin irritation – Category 2 H315 Causes serious eye irritation – Category 2A H319
Regulation (EC) No. 1272/2008 (CLP)	Causes skin irritation – Category 2 H315 Causes serious eye irritation – Category 2A H319
2.2 Label elements	According to GHS and Regulation (EC) No. 1272/2008 (CLP)
Hazard pictogram(s)	
Signal word(s)	WARNING
Hazard statement(s)	Causes skin irritation Causes serious eye irritation
Precautionary statement(s)	Wear eye and face protection Wear protective gloves Wash thoroughly after handling IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing



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If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of water
 Take off contaminated clothing and wash it before reuse
 If skin irritation occurs: Get medical advice/attention Specific treatment(see First Aid information on product label and/or Section 4 of the SDS)

- 2.3 Other hazards None
- 2.4 Additional Information None

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

EC Classification No. 1272/2008

Ingredient(s)	% by Vol	CAS No.	EC No.	Hazard pictogram(s) and Hazard statement(s)
Proprietary corrosion inhibitor	Confidential	Proprietary	None assigned	None
Calcium chloride	28-32	10043-52-4	233-140-8	H315, H319, WARNING, GHS07 Pictogram
Water	Balance	7732-18-5	231-791-2	None

3.2 Additional Information
 None.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms develop.
Skin Contact	Wash with plenty of soap and water. Get medical attention if symptoms develop.
Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open. Get medical attention if symptoms develop.
Ingestion	Give plenty of water to drink. If symptoms develop, obtain medical attention. Get medical attention if symptoms develop.

4.2 Most important symptoms and effects, both acute and delayed

Acute Symptoms/Effects: Listed below.
Inhalation (Breathing): Inhaling mist, spray, or vapor may cause irritation to upper respiratory tract (nose and throat). Nasal mucosal and oropharyngeal erythema.
Skin: Skin Irritation. Skin exposure may cause slight irritation, redness, itching, and swelling. May cause more severe response if skin is damp, abraded (scratched or cut), or covered by clothing, gloves, or footwear. Prolonged contact may cause more severe symptoms. Damage is localized to contact areas.
Eye: Eye Irritation. Eye exposure may cause serious eye irritation and pain. May cause conjunctival swelling and cornea opacification from hypertonic solution. Corneal eye pain, redness, acute corneal thickening or whitening.
Ingestion (Swallowing): Consumption of solids or hypertonic solutions causes nausea, vomiting, and increased thirst.



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Delayed Symptoms/Effects:

- Chronic exposures to skin and mucus membranes that cause irritation may cause a chronic dermatitis or mucosal membrane problem

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media

As appropriate for surrounding fire.

Water spray, foam, dry powder or CO2.

Unsuitable Extinguishing Media

None known.

5.2 Special hazards arising from the substance or mixture

None anticipated.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Caution - spillages may be slippery. Ensure adequate ventilation. Wear protective gloves.

6.2 Environmental precautions

Do not release large quantities into the surface water or into drains.

6.3 Methods and material for containment and cleaning up

Absorb spillages onto sand, earth or any suitable adsorbent material.

6.4 Reference to other sections

See Also Section: 8, 13.

7. SECTION 7: HANDLING AND STORAGE

General hygiene measures for the handling of chemicals are applicable.

7.1 Precautions for safe handling

Wear suitable personal protective equipment if in contact. Wash hands and exposed skin after use. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool, well ventilated place.

Storage Temperature

Ambient.

Storage Life

Stable under normal conditions.

Incompatible materials

Strongly acidic.

7.3 Specific end use(s)

Corrosion inhibitor.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION




8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Proprietary corrosion inhibitor	Proprietary	-	-	-	-	Not established
Calcium chloride	10043-52-4	-	-	-	-	
Water	7732-18-5	-	-	-	-	

Source: WEL: Workplace Exposure Limit (UK HSE EH40)

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8.1.2 Biological limit value	Not established.
8.1.3 PNECs and DNELs	Not established.
8.2 Exposure controls	
8.2.1 Appropriate engineering controls	Provide adequate ventilation.
8.2.2 Personal protection equipment	
Eye/face protection	Wear protective eye glasses with side shields and/or goggles.
	
Skin protection (Hand protection/ Other)	Wear suitable gloves and PPE if skin contact is likely. Wear impervious gloves (EN374).
	
Respiratory protection	Normally no personal respiratory protection is necessary.
	
Thermal hazards	Not applicable.
8.2.3 Environmental Exposure Controls	Do not release large quantities into the surface water or into drains.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Clear to cloudy light yellow liquid
Odour	None
Odour Threshold	Not established.
pH	6.0-10.0
Freezing Point	<-20F
Boiling point	Approx. 212F
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not Available
Vapour density	Not applicable.
Relative density	1.3 @ 20C
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2 Other information	None.



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10. SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Stable under normal conditions.
10.2	Chemical stability	Stable under normal conditions.
10.3	Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4	Conditions to avoid	None anticipated.
10.5	Incompatible materials	Strong acids.
10.6	Hazardous Decomposition Product(s)	No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
	Acute toxicity	No data available
	Irritation	No data available
	Corrosivity	Not classified.
	Sensitisation	No data available
	Repeated dose toxicity	No data available.
	Carcinogenicity	No evidence of carcinogenicity.
	Mutagenicity	No evidence of mutagenic potential.
	Toxicity for reproduction	None anticipated.
11.2	Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Not data available
12.2	Persistence and degradability	No data available
12.3	Bioaccumulative potential	No information available.
12.4	Mobility in soil	No information available
12.5	Results of PBT and VPVB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Use appropriate tools to put the spilled substance in a convenient waste disposal container. Finish cleaning by spreading soap and water on the contaminated surface.
13.2	Additional Information	Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous for transport.

14.1	UN number	Not applicable.
14.2	UN Proper Shipping Name	Not applicable.
14.3	Transport hazard class(es)	Not applicable.
14.4	Packing Group	Not applicable.
14.5	Environmental hazards	Not applicable.
14.6	Special precautions for user	Not applicable.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.



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15. SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations	
	Authorisations and/or restrictions on use	
	Candidate List of Substances of Very High Concern for Authorization	Not listed.
	REACH: ANNEX XIV List of substances subject to authorization	Not listed.
	REACH: ANNEX XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Not listed.
	Community Rolling Action Plan (CoRAP)	All chemicals are not listed.
15.2	GHS	Created in accordance with the OSHA's implementation of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
15.3	US EPA	TSCA: Corrosion inhibitor, water and Calcium chloride listed on TSCA

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

No information available.