

Prepared on: May 07, 2024 09:20EDT

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Name of Chemical: FCL-X

Location: 345 Industrial Park Blvd.
Nahunta, GA 31553

Section 1: Identification

1.1 Product Identifier

Product Form

FCL-X is a water-based proprietary solution that is translucent in color, free-flowing, and lacks any discernible odor.

Product Name

FCL-X

1.2 Intended Use of the Product

Use of the Substance/Mixture

FCL-X is an extinguishing agent designed to extinguish lithium-ion battery fires and/or thermal runaways. FCL-X is intended to be applied from a pressurized portable extinguisher for optimal performance.

1.3 Name, Address, and Telephone of the Responsible Party

Full Circle Lithium
345 Industrial Park Blvd
Nahunta, GA 31553

Emergency Telephone Number

Office: 912.462.2084

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture:

2.1.1 GHS Classification (EC Regulation 1272/2008 and US OSHA Regulations)

Acute Toxicity: Category 0

Eye Irritant: Category 0

2.2.2 EC: Classification according to 67/548/EEC or 1999/45/EC [DSD/DPD]

Xn, R22, Xi, R36

2.2 Label Elements

2.2.3 Hazard Pictogram



2.2.4 Signal Word

Warning

Hazard Statement

Harmful if swallowed

Causes eye irritation

Precautionary Statement(s):

Wear protective gloves/protective clothing/eye protection/face protection. **P280**

IF IN EYES: Rinse cautiously with water for several minutes. If contact lenses are present and easy to remove, continue rinsing. **P305+P351+P338**

If eye irritation persists, get medical advice/attention. **P337+P313**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. **P301+P312**

Rinse mouth. **P330**

Wash hands thoroughly after handling. **P264**

Additional Precautionary Statement(s)

Do not eat, drink, or smoke when using this product. **P270**

Dispose of contents/container to an approved waste disposal facility. **P501**

2.3 Other Hazards

None

Section 3: Composition/Information on Ingredients

3.1 Substance

Water-based proprietary solution

3.2 Mixture (Include percentages & GHS-US classification)

Water-based proprietary solution

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Eyes: Flush with water for at least 15 minutes. If irritation occurs and persists, contact a medical doctor.

Skin: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

Ingestion: Drink 1 to 2 glasses of water. Never give anything by mouth to an unconscious person. If any discomfort persists, obtain medical attention.

Section 5: Fire Fighting Measures

5.1 Extinguishing Media

Not Applicable

5.2 Special Hazards Arising from the Substance or Mixture

Hazardous Combustion Products: None

General Hazard: No known physical hazard, no combustible

Properties Contributing to Flammability: None

Flashpoint: Not applicable

Flammable limits in the air: Upper: Not available Lower: Not available

Auto Ignition Temperature: Not applicable

Sensitivity to Static Charge: Not applicable

Sensitivity to Static Impact: Not applicable

5.3 Advice for Fire-fighters

Wear full protective clothing and self-contained breathing apparatus (SBCA) for firefighting.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Before cleanup measures begin, review the entire SDS with particular attention to Section 2, Hazards Identification; Section 8, Exposure Controls/Personal Protection.

6.2 Environmental Precautions

Do not wash into drains. Dispose of at a qualified waste disposal facility.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

Avoid contact with eyes, skin, or clothing. Use adequate ventilation. Wear safety glasses or goggles and rubber gloves. Wash thoroughly after handling.

7.2 Conditions for Safe Storage Including any Incompatibilities

None

Section 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Exposure Limits

Chemical Name	EU TWA STEL	EH40 (UK WEL)		USA (ACGIH)		USA (OSHA)	
		TWA	STEL	TWA	STEL/Ceiling	PEL	STEL/Ceiling
FCL-X	None*	None*	None*	None*	None*	None*	None*

8.2 Exposure Controls

Personal Protective Equipment

Eyes and Face: Safety Glasses or goggles

Respiratory: Not Required

Protective Clothing: Gloves (nitrile, neoprene, PVC/rubber (permeation breakthrough not detected during 6-hour test))

Work Hygienic Practices: Quick drench eyewash and safety shower

Section 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Appearance:	Translucent aqueous solution
Odor:	Not Discernible
Odor Threshold:	None
pH:	@ 25C 6.5
Melting Point:	Not Applicable
Boiling Point:	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Flammable Limits:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Specific Gravity:	1.0 g/ml
Solubility in Water:	Not Applicable
Partition Coefficient n-octanol/water:	Not Available
Auto-Ignition Temperature:	Not Applicable
Decomposition Temperature:	Not Applicable
Viscosity:	Not Applicable
Explosive Properties:	Not Explosive

Oxidizing Properties:

Not an Oxidizer

9.2 Other Information

Self-Reactive Properties:

Does not meet classification criteria

Pyrophoric Properties:

Does not meet classification criteria

Self-heating Properties:

Does not meet classification criteria

Water Reactive Properties:

Does not meet classification criteria

Corrosive to Metals:

Does not meet classification criteria

Molecular Weight:

18.02

Section 10: Stability and Reactivity

10.1 Reactivity

Reacts with Acids and Bases

10.2 Chemical Stability

Stable

10.3 Possibility of Hazardous Reaction:

Hazardous Polymerization will not occur

10.4 Conditions to Avoid

Contact with Acid and Bases

10.5 Incompatible Metals

Acids and Bases

10.6 Hazardous Decomposition Products:

None

Section 11: Toxicological Information

11.1 Information on Toxicological Effects

a) Acute Toxicity

Classified as not having acute toxicity basis of the non-water component

b) Skin Corrosion/Irritation

Classified as not irritating skin on basis of the non-water component

c) Serious Eye Damage/Irritation

Classified as irritant to eyes on the basis of the non-water component

d) Respiratory/Skin Sensitivity

Classified as not sensitizing to skin on the basis of the non-water component

e) Germ Cell Mutation

Classified as not mutagenic on the basis of the non-water component

f) Carcinogenicity

Classified as non-carcinogenic based on the non-water component

g) Reproductive Toxicity

Classified as not a reproductive toxin based on the non-water component

h) STOT-Single Exposure

Classified as not causing organ damage based on the non-water component

i) STOT- Repeated Exposure

Classified as not causing organ damage on repeat exposure based of the non-water component

j) Aspiration Hazard

Does not present an aspiration hazard

Acute Effects from Overexposure:

No data is available for the formulation

No envisaged effects other than acute effects from local irritation

Chronic Effects from Overexposure:

No data available for product.

Section 12: Ecological Information

12.1 Toxicity:

No classification

12.2 Mobility in Soil

No data available for this product

12.3 Other Adverse Effects

None

Section 13: Disposal Considerations

13.1 Waste Treatment Methods

Use a qualified industrial waste disposal facility. Dispose of waste according to local and Federal laws and regulations.

Section 14: Transport Information

14.1 UN Number	None
14.2 UN Proper Shipping Name (IMDG, ICAO, ADR, DOT)	None
14.3 Transport Hazard Class(es) (IMDG, ICAO, ADR, DOT)	
Based on available data, the classification criteria are not met	
14.4 Packing Group (IMDG, ICAO, ADR, DOT)	None
14.5 Environmental Hazards	
Based on available data, the classification criteria are not met	
14.6 Special Precautions for User	None
14.7 Transport in Bulk according to Annex II of MARPOL 73/78 and IBC Code	None