

Safety Data Sheet

Canadian WHMIS Standards & GHS Rev04

Reviewed on 02/16/2018

Product and Company Identification

- Product Identifier
- Trade name: LipHter+
- *Product Description:* No further relevant information
- · Application of the substance / the mixture: For use in condensate neutralizers.
- · Details of the Supplier of the Safety Data Sheet:
- · Manufacturer/Supplier: Axiom Industries Ltd. 3603 Burron Avenue Saskatoon, SK, Canada S7P 0E4 Phone: (306) 651-1815 www.axiomind.com
- Emergency telephone number: PERS Emergency Response: Domestic and Canada - 1-800-633-8253, International 1-801-629-0667

<u>? Hazard(s) Identification</u>

· Classification of the substance or mixture:

GHS08 Health hazard

Respiratory Sensitizer - Category 1A H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Acute Toxicity (Oral) - Category 4	H302 Harmful if swallowed.
Skin Irritation - Category 2	H315 Causes skin irritation.
Eye Irritation - Category 2A	H319 Causes serious eye irritation.

· Label elements:

- · GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:



· Signal word: Danger

· Hazard-determining components of labeling: TRADE SECRET TRADE SECRET Hazard statements: H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. Precautionary statements:



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P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P312	If swallowed: Call a poison center/doctor if you feel unwell.
P330	Rinse mouth.
P302+P352	If on skin: Wash with plenty of water.
P321	Specific treatment (see on this label).
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a poison center/doctor.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.

· Unknown acute toxicity:

LipHter+ does not need any hazard identification labels when used for its intended application as a condensate neutralization media because of the low probability an end user will come into contact with the media.

This value refers to knowledge of known, established toxicological or ecotoxicological values.

• Hazard description:

WHMIS-symbols:

D2B - Toxic material causing other toxic effects



· NFPA ratings (scale 0 - 4)

Health = 2 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 2 Health = 2 FIRE • Fire = 0 REACTIVITY O Physical Hazard = 0

· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on ingredients:

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

• Dangerous Components:

TRADE SECRET	≥85% w/w
Acute Toxicity (Oral) - Category 4, H302	
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TRADE SECRET	5-10% w/w
Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	
TRADE SECRET	2-12% w/w
Skin Corrosion - Category 1A, H314; () Acute Toxicity (Oral) - Category 4, H302	_
TRADE SECRET	≤2.5% w/w
Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	_
TRADE SECRET	≤2.5% w/w
♦ Specific Target Organ Toxicity - Single Exposure - Category 3, H335	
	 Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335 TRADE SECRET Skin Corrosion - Category 1A, H314; Acute Toxicity (Oral) - Category 4, H302 TRADE SECRET Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335 TRADE SECRET

- · Description of first aid measures:
- After inhalation: Remove affected person to fresh air. Seek medical attention if symptoms persist.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment.

• After eve contact:

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

- Seek medical treatment.
- After swallowing:

Never give anything by mouth to an unconscious person.

- Seek medical treatment.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed: No further relevant information available.
- Indication of any immediate medical attention and special treatment needed:
- No further relevant information available.
- 5 Fire-Fighting Measures
- Extinguishing media:
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- For safety reasons unsuitable extinguishing agents: No further relevant information available.
- Special hazards arising from the substance or mixture:
- One of the proprietary components in the formula can react violently or ignite with interhalogens such as chlorine trifluoride (CIF₃) or bromine pentafluoride (BrF₅), and incandescently with phosphorus pentachloride (PCl₅).
- Advice for firefighters:
- Protective equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Accidental Release Measures:

- · Personal precautions, protective equipment and emergency procedures:
- Ensure adequate ventilation. Avoid formation of dust.
- Avoid breathing dust.
- · Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:
- Pick up mechanically.





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Dispose of the collected material according to regulations. *Reference to other sections:* See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and Storage

· Handling

- Precautions for safe handling: Avoid contact with skin, eyes and clothing Prevent formation of aerosols.
 Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities:

- · Storage
- · Requirements to be met by storerooms and receptacles:
- Store in a cool, dry place.

Store in a well ventilated place.

Store in the original container.

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Recommended storage temperature: 10 30 °C

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• Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

· Additional information about design of technical systems: No further data; see section 7.

· Control parameters:

· Co	mponents with occupational exposure limits:
TR	ADE SECRET
EL	Short-term value: 10** mg/m³ Long-term value: 10* 3** mg/m³ *inhalable fume;**respirable dust and fume
EV	Long-term value: 10 mg/m³ inhalable
TR	ADE SECRET
EL	Long-term value: 2 mg/m ³
EV	Long-term value: 2 mg/m ³
TR	ADE SECRET
EL	Short-term value: 10** mg/m³ Long-term value: 5* 10*** 3**** mg/m³ *dust & fume**fume; Rouge: ***total dust****resp.
EV	Long-term value: 5* 10** mg/m³ *respirable, including Rouge;**total dust
TR	ADE SECRET
EL	Long-term value: 1.0 mg/m³ respirable, as Al
EV	Long-term value: 10 mg/m³ total dust
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- · Additional information: The lists that were valid during the creation of this SDS were used as basis.
- · Exposure controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS. Where acceptable concentrations cannot be maintained by general mechanical ventilation, local exhaust ventilation is recommended.

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- · Personal protective equipment:
- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

• Breathing equipment:



Suitable respiratory protective device recommended.

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

• Eye protection:



Face protection



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- Appearance:
 - Form:



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Color:	White
· Odour:	Odorless
· pH-value:	Not applicable.
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Not determined. ≥2,230 °C
· Flash point:	None
· Flammability (solid, gaseous):	Not determined.
· Ignition temperature:	>370 °C
• Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
 Explosion limits: Lower: Upper: 	Not determined. Not determined.
· Vapor pressure:	Not applicable.
 Density: Relative density: Vapor density: Evaporation rate: 	Not determined. Not applicable. Not applicable.
 Solubility in / Miscibility with: Water: 	Insoluble.
· Partition coefficient (n-octanol/water): Not determined.
 Viscosity: Dynamic: Kinematic: 	Not applicable. Not applicable.
 Solvent content: VOC content: 	0.00 %
Solids content: • Other information:	100.0 % No further relevant information available.
10 Stability and reactivity	

10 Stability and reactivity

· *Reactivity:* No further relevant information available.

· Chemical stability: Stable under normal conditions.

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions:

One of the proprietary components in the formula can react violently or ignite with interhalogens such as chlorine trifluoride (CIF₃) or bromine pentafluoride (BrF₅), and incandescently with phosphorus pentachloride (PCI₅).

• Conditions to avoid: No further relevant information available.

· Incompatible materials: Acids, interhalogens, phosphorus pentachloride, and chlorine trifluoride.

· Hazardous decomposition products: No dangerous decomposition products known.



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TRADE S		t are relevant for classification:
Oral	LD50	810 mg/kg (Mouse)
TRADE S		
Oral	LD50	10,000 mg/kg (Rat) (OECD 401)
Dermal	LD50	5,000 mg/kg (Rabbit) (OECD 402)
	LC50/4 h	>140->2,000 mg/l (Rat) (OCED 403) Maximum attainable concentration, mortality does not appear.
		10,000 mg/l (Zebra fish) (OECD 203)
TRADE S	ECRET	
Oral	LD50	>5,000 mg/kg (Rat)
TRADE S	ECRET	
Oral	LD50	>10,000 mg/kg (Rat)
Inhalative	LC50/4 h	>2.6 mg/l (Rat)
TRADE S	ECRET	
Oral	LD50	500 mg/kg (Rat)
On the sk On the ey Sensitizat Additiona	e: Causes tion: May o I toxicolo uct shows	to skin and mucous membranes. serious eye irritation. cause allergy or asthma symptoms or breathing difficulties if inhaled. gical information: s the following dangers according to internally approved calculation methods

Group 2A - Probably carcinogenic to humans Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

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· NTP (National Toxicology Program):

None of the ingredients are listed.

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2 Ecological information

- · Toxicity:
- · Aquatic toxicity:
- TRADE SECRET

EC50 >1,000 mg/l (Daphnia) (OECD 202)

• Persistence and degradability: No further relevant information available.

- · Behavior in environmental systems:
- · *Bioaccumulative potential:* No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment:
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

3 Disposal considerations

- · Waste treatment methods:
- *Recommendation:* Observe all federal, state and local environmental regulations when disposing of this material.

· Uncleaned packagings

• Recommendation: Disposal must be made according to official regulations.

4 Transport information · UN-Number: · DOT, TDG, ADN, IMDG, IATA Non-Regulated Material • UN proper shipping name: · DOT, TDG, ADN, IMDG, IATA Non-Regulated Material • Transport hazard class(es): · DOT, TDG, ADN, IMDG, IATA Non-Regulated Material · Class: · Packing group: · DOT, TDG, IMDG, IATA Non-Regulated Material • Environmental hazards: Not applicable. - Special precautions for user: Not applicable. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable. Non-Regulated Material • UN "Model Regulation": 5 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture: • SARA (Superfund Amendments and Reauthorization):

• Section 355 (extremely hazardous substances):

None of the ingredients are listed.

• Section 313 (Specific toxic chemical listings):

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• TSCA (Toxic Substances Control Act): All ingredients are listed or exempt from listing.

· Canadian Domestic Substances List (DSL):

· Chemicals known to cause cancer: None of the ingredients are listed. • Canadian substance listings:

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All ingredients are listed.			
· Canadian Ingredie	ent Disclosure list (limit 0.1%):		
None of the ingredi	None of the ingredients are listed.		
· Canadian Ingredie	ent Disclosure list (limit 1%):		
All ingredients are I	isted.		
• GHS label elemen The product is class • Hazard pictogram	sified and labeled according to the Globally Harmonized System (GHS).		
GHS07 GHS08			
· Signal word: Dang	Jer		
TRADE SECRET TRADE SECRET Hazard statements H302 Harmful if swi H315 Causes skin i H319 Causes serio H334 May cause al Precautionary sta P261 P264 P270 P280 P284 P301+P312 P330 P302+P352	ng components of labeling: s: allowed. irritation. bus eye irritation. llergy or asthma symptoms or breathing difficulties if inhaled.		
P304+P340 P305+P351+P338 P332+P313 P362+P364 P337+P313 P342+P311 P501	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention. If experiencing respiratory symptoms: Call a poison center/doctor. Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 10)		



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• National regulations:

None of the ingredients are listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

6 Other information:

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

• Date of preparation / last revision: 02/16/2018 / 5

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.
 SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106