

# PRODUCT DATA SHEET

## LITHIUM 12-HYDROXYSTEARATE | LD | HX-1

Pre-formed Thickener


### DESCRIPTION

**LITHIUM 12-HYDROXYSTEARATE** is a pre-formed thickener/gellant used to manufacture lithium greases with fewer steps, less energy, in significantly less time and with greater accuracy and consistency than the conventional in-situ grease method. Because the water has already been removed during the manufacture of the pre-thickener, no additional time or energy is required for evaporation during grease making. The end result is a lower total manufacturing cost. Also, the significant reduction in heat used allows grease manufacturing with heat sensitive base oils (such as soy, vegetable or ester) and additives that may degrade or hydrolyze during conventional in-situ processing. The **LD** (low dust) version is a coarse powder version that performs identically to the standard (fine powder) version but is less dusty for easier handling. The **HX-1** version is NSF Listed for use in the manufacture of H1 grease (incidental food contact).

### KEY FEATURES & BENEFITS

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| <ul style="list-style-type: none"> <li>• 190 – 220 °C Dropping Point</li> <li>• Accuracy and Consistency Grease Production</li> <li>• Suitable for heat sensitive base oils (including soy, vegetable, ester) and additives</li> <li>• Lower Dusting Version (LD) Available</li> </ul> | <ul style="list-style-type: none"> <li>• No Water to Remove</li> <li>• Lower Total Manufacturing Cost</li> <li>• Processing Time versus Insitu Method (from days to hours)</li> <li>• NSF HX-1 &amp; White Book™ Listed</li> </ul> |
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### TYPICAL PROPERTIES

Property	LITHIUM 12-HYDROXYSTEARATE	LITHIUM 12-HYDROXYSTEARATE LD	LITHIUM 12 HX-1
Appearance	Off-white Powder	Coarse Powder	Coarse Powder
Moisture, % by wt.	0.35	0.35	0.35
Total Ash, % by wt.	4.8	4.8	4.8
Free Fatty Acid, % by wt.	< 0.5	< 0.5	< 0.5
Free Alkalinity %	0.20	0.20	0.20
Melting Range, °C	213 - 217	213 - 217	213 - 217
Average Particle Size (µm)	12	200	200
Li%	2.2	2.2	2.2
NSF HX-1 Registration	Not Listed	Not Listed	 163792

### APPLICATION

- Gelling agent or thickener in production of lithium greases
- Gelling agent or thickener in production of H1 grease for incidental food contact
- Gelling Synthetic Ester Oils, PAO (Poly Alpha Olefin), and Soy or other Vegetable Base Oils
- Used to increase production throughput by allowing difficult grease formulations to be made in as little as four (4) hrs.
- Please refer to Grease Additives Reference Guide for starter formulation details.



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### SHIPPING, STORAGE & HANDLING

**Packaging** – Standard packaging for powder is 40 lb bag / 1440 lb skid. Other packaging may be available depending on order quantities and inventory status.

**Shelf Life** - 36 months when stored indoors in a dry environment at ambient temperatures. Products > 36 months old may be useable; contact Blachford for a specific recommendation.

**Shipping** – non-hazardous, heated freight not required

**Harmonized Tariff Code** – 2918.19.90.00 (NA) – 2918 19 98 90 (EU, UK)

### REGULATORY

**Chemical Inventories** – Listed on DSL (Canada), TSCA (USA), EINECS (EU) and other commonly referenced inventories; contact Blachford for specific confirmations.


**Conflict Minerals** – Does not intentionally contain gold, tantalum, tin, tungsten or their derivatives

**Proposition 65** – Contains no substances known by the State of California to cause cancer or reproductive toxicity

**40 CFR 261: RCRA** – Does not meet the definition of a ‘hazardous waste’

**RoHS / CONEG Heavy Metals** – Contains no intentionally introduced lead, cadmium, mercury, chromium, PBBs or PBDEs and complies with concentration limits

**Reach** – Registered by HL Blachford Ltd.

**NSF HX-1** – Registration # 163792, NSF White Book™ Listed 

### ABOUT BLACHFORD

H.L. Blachford Ltd was founded in Montreal in 1921 by Henry Lloyd Blachford and has grown its operations to include manufacturing sites in the USA, Canada and the UK. Blachford manufactures fatty acid based products for a variety of industries including rubber, tire, powdered metal, plastics, PVC, food, wire drawing and metal working. Blachford is also a leading manufacturer of noise and vibration control technology, heavy duty rubber mats and headliners for the transportation and agricultural equipment industries.

### RESPONSIBLE CARE® - OUR COMMITMENT TO SUSTAINABILITY – [www.responsiblecare.org](http://www.responsiblecare.org)

Responsible Care® is the global chemical industry’s commitment to sustainability. As a founding member of the Responsible Care® initiative, Blachford has dedicated itself, its technology and its business practices to sustainability – the betterment of society, the environment and the economy. Blachford follows the Responsible Care® ethic and principles to innovate for safer and more environmentally friendly products and processes, and to work to eliminate harm throughout the entire life cycle of the products.

### DISCLAIMER

The purpose of this document is to provide general information and advice. All statements, formulations and recommendations are offered in good faith but without guarantee. Users of Blachford products are themselves responsible for compliance with any legal provisions including those relating to patent laws and accident prevention.

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