## INTERLUBE IL-BIO GREASE

**BIODEGRADABLE LITHIUM COMPLEX GREASE** 

IL-BIO GREASE

## **DESCRIPTION:**

IL-Bio Grease is a readily biodegradable, minimal toxicity lithium complex grease formulated to provide a high film strength and withstand high operating temperatures, while maintaining excellent stability. il-Bio Grease includes a high viscosity base oil for high load capacities. il-Bio Grease also has excellent anti-wear properties and improved resistance to water washout, in addition to remaining stable under high temperatures. It is designed for heavy duty use in a variety of industrial, mobile and marine applications. Offered in NLGI 2 grade.

Specifications, approvals and recommendations:

- USDA BioPreferred Program (US Department of Agriculture)
- Classified EAL (Environmentally Acceptable Lubricant) according to the VGP (Vessel General Permit) 2013 of the EPA (Environmental Protection Agency of the United States).

Figure of thickener    Comparison of the compari	ERLUBE IL-BIO GREASE	IL-220FS
Figure of thickener    Comparison of the compari		
Appearance	Base oil type	SYNTHETIC ESTER
Penetration after mixing, 265 à 295 60 cycles (D217) Dropping point, °C (D225) Viscosity (D445) at 40°C, cSt 4 Ball Weld, kg (D2596) 400 64-ball wear, groove diameter, mm (D2266) Corrosion on copper strip (D4048) 1B Water washout at 79°C, % loss (D1264) Water spray -ff, % loss (D4049) 13,6 Rolling stability, shift points (D1831) 48 Stability in water, change points after Shell Roll (D7342) 431 Environmental Stewardship: Meets EPA requirements to rank Readily biodegradable (i.e. > 60%), OECD 301B, % Réussi Siodegradability, % Minimal toxicity, Réussi DECD 201 - Algae (EC 50), 72 h, mg/L DECD 202 - Daphne (EC 50), 48 h, mg/L DECD 203 - Fish (LC 50), 96 hr, mg/L DECD 203 - Fish (LC 50), 96 hr, mg/L  > 26 000 mg/ DECD 203 - Fish (LC 50), 96 hr, mg/L  > 40 000 mg/	Type of thickener	LITHIUM COMPLE
Dropping point, °C (D225)  Dropping point, °C (D225)  Driscosity (D445) at 40°C, cSt  A Ball Weld, kg (D2596)  A-ball wear, groove diameter, mm (D2266)  Drorrosion on copper strip (D4048)  Mater washout at 79°C, % loss (D1264)  Water spray -ff, % loss (D4049)  Rolling stability, shift points (D1831)  Environmental Stewardship: Meets EPA requirements to rank  Readily biodegradable (i.e. > 60%), OECD 301B, %  Minimal toxicity,  Minimal toxicity,  Biodegradability, %  Minimal toxicity  DECD 201 - Algae (EC 50), 72 h, mg/L  DECD 202 - Daphne (EC 50), 48 h, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L	Appearance	STICKY
Viscosity (D445) at 40°C, cSt  4 Ball Weld, kg (D2596)  4 ball Weld, kg (D2596)  4 ball wear, groove diameter, mm (D2266)  Corrosion on copper strip (D4048)  Nater washout at 79°C, % loss (D1264)  Nater spray -ff, % loss (D4049)  Rolling stability, shift points (D1831)  Environmental Stewardship: Meets EPA requirements to rank  Readily biodegradable (i.e. > 60%), OECD 301B, %  Minimal toxicity,  Biodegradability, %  Minimal toxicity  DECD 201 - Algae (EC 50), 72 h, mg/L  DECD 202 - Daphne (EC 50), 48 h, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  200 - 200	Penetration after mixing, 60 cycles (D217)	265 à 295
4 Ball Weld, kg (D2596) 400 4-ball wear, groove diameter, mm (D2266) 6-ball wear, groove diameter, mm (D264) 6-ball wear, groove diame	Dropping point, °C (D225)	255
A-ball wear, groove diameter, mm (D2266)  Corrosion on copper strip (D4048)  Water washout at 79°C, % loss (D1264)  Water spray -ff, % loss (D4049)  Rolling stability, shift points (D1831)  Environmental Stewardship: Meets EPA requirements to rank  Readily biodegradable (i.e. > 60%), OECD 301B, %  RéUSSI (> 75  Minimal toxicity,  RéUSSI  Biodegradability, %  Minimal toxicity  REUSSI  DECD 201 - Algae (EC 50), 72 h, mg/L  DECD 202 - Daphne (EC 50), 48 h, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L	Viscosity (D445) at 40°C, cSt	195,7
Corrosion on copper strip (D4048)  Nater washout at 79°C, % loss (D1264)  Nater spray -ff, % loss (D4049)  Rolling stability, shift points (D1831)  Environmental Stewardship: Meets EPA requirements to rank  Readily biodegradable (i.e. > 60%), OECD 301B, %  Réussi (> 75  Minimal toxicity,  Riodegradability, %  Ninimal toxicity  Riodegradability, %  Ninimal toxicity  Reussi (> 26 000 mg/DECD 201 - Algae (EC 50), 72 h, mg/L  DECD 202 - Daphne (EC 50), 48 h, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  Nater spray -ff, % loss (D1264)  13,6  4,2%  13,6  14,8  15  16  17  18  18  19  19  19  19  19  19  19  19	4 Ball Weld, kg (D2596)	400
Water washout at 79°C, % loss (D1264)       4,2%         Water spray -ff, % loss (D4049)       13,6         Rolling stability, shift points (D1831)       +8         Stability in water, change points after Shell Roll (D7342)       +31         Environmental Stewardship: Meets EPA requirements to rank         Readily biodegradable (i.e. > 60%), OECD 301B, %       RÉUSSI (> 75         Minimal toxicity,       RÉUSSI         Biodegradability, %       > 60         Minimal toxicity       RÉUSSI         DECD 201 - Algae (EC 50), 72 h, mg/L       > 26 000 mg/         DECD 202 - Daphne (EC 50), 48 h, mg/L       > 13 000 mg/         DECD 203 - Fish (LC 50), 96 hr, mg/L       > 40 000 mg/	4-ball wear, groove diameter, mm (D2266)	0,59
Water spray -ff, % loss (D4049)  Rolling stability, shift points (D1831)  Environmental Stewardship: Meets EPA requirements to rank  Readily biodegradable (i.e. > 60%), OECD 301B, %  Minimal toxicity,  RéUSSI Biodegradability, %  Minimal toxicity  PECD 201 - Algae (EC 50), 72 h, mg/L  DECD 202 - Daphne (EC 50), 48 h, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L	Corrosion on copper strip (D4048)	1B
Rolling stability, shift points (D1831) +8 Stability in water, change points after Shell Roll (D7342) +31  Environmental Stewardship: Meets EPA requirements to rank  Readily biodegradable (i.e. > 60%), OECD 301B, % RÉUSSI (> 75  Minimal toxicity, RÉUSSI  Biodegradability, % > 60  Minimal toxicity RÉUSSI  DECD 201 - Algae (EC 50), 72 h, mg/L > 26 000 mg/  DECD 202 - Daphne (EC 50), 48 h, mg/L > 13 000 mg/  DECD 203 - Fish (LC 50), 96 hr, mg/L > 40 000 mg/	Water washout at 79°C, % loss (D1264)	4,2%
Environmental Stewardship: Meets EPA requirements to rank  Readily biodegradable (i.e. > 60%), OECD 301B, %  Minimal toxicity,  Biodegradability, %  Minimal toxicity  PECD 201 - Algae (EC 50), 72 h, mg/L  DECD 202 - Daphne (EC 50), 48 h, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  DECD 203 - Fish (LC 50), 96 hr, mg/L  211 - 431  122 - 40 000 mg/	Water spray -ff, % loss (D4049)	13,6
Environmental Stewardship: Meets EPA requirements to rank           Readily biodegradable (i.e. > 60%), OECD 301B, %         RÉUSSI (> 75           Minimal toxicity,         RÉUSSI           Biodegradability, %         > 60           Minimal toxicity         RÉUSSI           DECD 201 - Algae (EC 50), 72 h, mg/L         > 26 000 mg/           DECD 202 - Daphne (EC 50), 48 h, mg/L         > 13 000 mg/           DECD 203 - Fish (LC 50), 96 hr, mg/L         > 40 000 mg/	Rolling stability, shift points (D1831)	+8
Readily biodegradable (i.e. > 60%), OECD 301B, %       RÉUSSI (> 75         Minimal toxicity,       RÉUSSI         Biodegradability, %       > 60         Minimal toxicity       RÉUSSI         DECD 201 - Algae (EC 50), 72 h, mg/L       > 26 000 mg/         DECD 202 - Daphne (EC 50), 48 h, mg/L       > 13 000 mg/         DECD 203 - Fish (LC 50), 96 hr, mg/L       > 40 000 mg/	Stability in water, change points after Shell Roll (D7342)	+31
Minimal toxicity,         RÉUSSI           Biodegradability, %         > 60           Minimal toxicity         RÉUSSI           DECD 201 - Algae (EC 50), 72 h, mg/L         > 26 000 mg/           DECD 202 - Daphne (EC 50), 48 h, mg/L         > 13 000 mg/           DECD 203 - Fish (LC 50), 96 hr, mg/L         > 40 000 mg/	Environmental Stewardship: Meets EPA requirements to rank	
Biodegradability, %       > 60         Minimal toxicity       RÉUSSI         DECD 201 - Algae (EC 50), 72 h, mg/L       > 26 000 mg/         DECD 202 - Daphne (EC 50), 48 h, mg/L       > 13 000 mg/         DECD 203 - Fish (LC 50), 96 hr, mg/L       > 40 000 mg/	Readily biodegradable (i.e. > 60%), OECD 301B, %	RÉUSSI (> 75
Minimal toxicity         RÉUSSI           DECD 201 - Algae (EC 50), 72 h, mg/L         > 26 000 mg/           DECD 202 - Daphne (EC 50), 48 h, mg/L         > 13 000 mg/           DECD 203 - Fish (LC 50), 96 hr, mg/L         > 40 000 mg/	Minimal toxicity,	RÉUSSI
DECD 201 - Algae (EC 50), 72 h, mg/L > 26 000 mg/ DECD 202 - Daphne (EC 50), 48 h, mg/L > 13 000 mg/ DECD 203 - Fish (LC 50), 96 hr, mg/L > 40 000 mg/	Biodegradability, %	> 60
DECD 202 - Daphne (EC 50), 48 h, mg/L > 13 000 mg/ DECD 203 - Fish (LC 50), 96 hr, mg/L > 40 000 mg/	Minimal toxicity	RÉUSSI
DECD 203 - Fish (LC 50), 96 hr, mg/L > 40 000 mg/	OECD 201 - Algae (EC 50), 72 h, mg/L	> 26 000 mg/L
7 40 000 mg/	OECD 202 - Daphne (EC 50), 48 h, mg/L	> 13 000 mg/L
	OECD 203 - Fish (LC 50), 96 hr, mg/L	> 40 000 mg/L
Non-biocumulative * (*Value calculated according to EPA standard)  REUSSI	Non-biocumulative * (*Value calculated according to EPA standard)	RÉUSSI
Peculiarities and additional environmental characteristics	Peculiarities and additional environmental characteristics	

The values of the characteristics shown in this table are typical values given for information only.



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## **KEY ATTRIBUTES / APPROVALS**

Applications and Industries: All industries (hydroelectric dams, construction, waste management, mining, dredging, marine, agriculture, oil and gas, plant operation, etc.) using equipment requiring the use of a grease heavy-duty, particularly systems where there is a risk of environmental contamination or where a leak or spill could reach a waste stream.

This product contains proprietary tackifier additives that make it ideal for shipbuilding, pin, bushing and pulley applications.

**PACKAGING:** 3.78 L bottle − 18.9 L bucket − 208 L barrel



