



High-performance extreme pressure biodegradable lithium grease.

APPLICATIONS

Environmentally Acceptable Lubricant (EAL) as per the US 2013 Vessel General Permit (VGP).

Environmentally sensitive applications requiring a NLGI 1 EAL grease.

Multipurpose and adapted to automatic lubrication systems.

FEATURES AND BENEFITS

BIOMULTIS EP 1 is designed for the lubrication of equipment operating in environmentally sensitive areas.

BIOMULTIS EP 1 does not contain lead, or other heavy metals considered harmful to human health and the environment.

BIOMULTIS EP 1 is adapted for the lubrication of applications operating in wet, corrosive and dusty conditions.

SPECIFICATIONS AND APPROVALS

✓	EAL – 2013 Vessel General Permit (VGP)	✓	ISO 6743-9: L-XCDEB 1
✓	DIN 51502: KP1K-30	✓	OECD 301 B >80%

TECHNICAL DATA : BIOMULTIS EP 1

CHARACTERISTICS	METHODS	UNITS	TYPICAL VALUES*
Thickener	—	—	Lithium
Base oil type	—	—	Synthetic
NLGI Grade	ASTM D 217/DIN 51 818	—	1
Color / Appearance	Visual	—	Brown / Smooth
Operating temperature range	—	°C	- 30 to +140
Penetration at 25°C	ASTM D 217/DIN 51 818	0.1 mm	310 - 340
Flow pressure 1400 mbar	DIN 51805	°C	<-45
Anti-rust performance SKF-EMCOR	ISO 11007	Rating	0/0
4-ball weld load	ASTM D 2596	kgf	315
4-ball wear	ASTM D 2266	mm	0.62
Dropping point	IP 396/ISO 2176	°C	> 160
Base oil viscosity of the base oil at 40 °C	ASTM D 445 / DIN 51 562-1 ISO 3104/ IP71	mm ² /s (cSt)	150

*The specifications above are for illustrative purposes and communicated for information only.

CUSTOMER BENEFITS

✓	BIOMULTIS EP 1 is a multipurpose grease, specially formulated for the lubrication of bearings, slide bearings or universal joints.
✓	BIOMULTIS EP 1 has been formulated with synthetic base oil giving extra performance at low temperature. It can replace a wide range of greases, allowing stock rationalization and simplification of maintenance.
✓	BIOMULTIS EP 1 is developed for loss lubrication in areas with very high environmental constraints.
✓	Low environmental impact: biodegradable, low toxicity to aquatic organisms.

GENERAL RECOMMENDATIONS

COMPATIBILITY

Please consult your Lubmarine Lubrication Engineer should you have any questions.

STORAGE

This product should be stored under cover in clean, dry conditions and protected from frost.

Recommended storage temperature range is 5°C to 50°C.

Drums that are stored on deck should be raised on pallets and covered to protect from the elements.

Always check regularly for leakage.

COMPLIMENTARY PRODUCTS AND SERVICES

✓	DiagomarPlus – Laboratory based used oil analysis program.
✓	Tech'Care – Suite of onboard testing kits.
✓	Technical Expertise & Support – Total Lubmarine engineers are on hand at worldwide locations to assist with lubrication concerns.
✓	Lube-On-Ship – Visualize your lube oils needs aboard Total Lubmarine's innovative virtual vessel.

Total Lubmarine / 00-00-2021 / BIOMULTIS EP 1

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk. A material safety data sheet conforming to the regulations in can be obtained via your Total Lubmarine technical advisor or from sdstotalms.total.com

