

BIO GREASE EP

Biodegradable Grease

In construction machines used in the sea, a river, a lake, there is a risk that the environment will be polluted due to leaked grease from machines. A very effective method to eliminate the pollution risk is to adopt a biodegradable grease. **BIO GREASE EP** is an ideal general-purpose grease which passed a severe Eco Mark standard in consideration for "person", "environment (biodegradability)" and "resources (long life)".

● Special Features

1. Gentle to Nature

BIO GREASE EP, which is formulated with polyol ester, special lithium compound thickeners and additives, has superior biodegradability and has been registered as an Eco Mark product (Eco Mark certification number 04 110 026).

2. Excellent Load-Bearing Performance

BIO GREASE EP is blended with outstanding extreme-pressure agents, so it has excellent load-bearing and anti-wear performances.

3. Good Lubricity on Wide Range of Temperatures

BIO GREASE EP, which has superior lubricity, can be used in a very wide temperature range, from -50°C to 130°C.

● Applications

- (1) Construction machinery used at resorts, waterfront, etc.
- (2) Dredging vessels and river- or lake-bed improvement vessels
- (3) Ceramics processing machinery
- (4) Water turbine generators

● Packaging

16-kg pail can and 400g bellows-type tube (20 pcs.)

● Typical Properties of BIO GREASE EP

NLGI grade		2
Appearance		Tan, Semi solid
Penetration (25°C, 60 strokes)		280
Worked stability (25°C, 100,000 strokes)		330
Dropping point	°C	182
Oil separation (100°C, 24h)	mass%	0.4
Evaporation (99 °C, 22h)	mass%	0.19
Biodegradability (OECD 301C)		
Acceptability criterion		
:28days, $\geq 60\%$	%	≥ 65
Acute toxicity test (JIS K 0102)		
Acceptability criterion		
:96h, LC50 $\geq 100\text{mg/L}$	mg/L	≥ 100
Approx. operating temperature range	°C	-50 to 130

Note: The typical properties may be changed without notice. (June 2023)



Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Base Oil(s), Thickener, Additives
Hazard pictograms:	
Signal word:	Warning
Hazard Statement:	Causes serious eye irritation
Precautionary Statements:	<ul style="list-style-type: none">• Do not handle until all safety precautions have been read and understood.• Wear protective gloves/protective clothing/eye protection/face protection.• Do not allow the eyes to become exposed to the product. Do not swallow the product.• Wash hands thoroughly after handling.• Do not eat, drink or smoke when using this product.
Prevention	
Response	<ul style="list-style-type: none">• IF SWALLOWED: Immediately call a POISON CENTER/doctor.• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.• IF ON SKIN: Wash with plenty of soap and water.• IF IN EYES: Rinse cautiously with water for several minutes.• Remove contact lenses, if present and easy to do. Continue rinsing.• If eye irritation persists: Get medical advice/attention.
Storage	<ul style="list-style-type: none">• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.• Containers that have been opened must be tightly sealed.
Disposal	<ul style="list-style-type: none">• Dispose of contents/container in accordance with local/regional/national/international regulations.• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.