



VpCI® METALWORKING PRODUCTS



EcoLine® Biobased Grease powered by Nano VpCI®



PRODUCT DESCRIPTION

EcoLine® Biobased Grease powered by Nano VpCI® is a multipurpose biobased grease with superior corrosion protection properties. It is formulated from vegetable oils, lithium-based thickener, extreme pressure additives, and Cortec® VpCI® corrosion inhibitors. It contains 86% USDA certified biobased content and is listed as part of the USDA BioPreferred® federal purchasing program.

EcoLine® Biobased Grease offers dual lubrication and corrosion protection for a variety of metal-to-metal applications. In addition to protecting metals through direct contact, it also protects metals in surrounding hard-to-reach cavities through vapor phase corrosion inhibiting action. EcoLine® Biobased Grease is especially valuable for protecting and lubricating metals exposed to harsh corrosive conditions and can be used under a broad range of operating temperatures.



Oil and Gas Industry



Transportation Industry



Marine Industry

FEATURES

- Contains 86% USDA certified biobased content
- High dropping point allows use in a broad range of operating temperatures
- Effective for high pressure applications
- Effective corrosion protection in contact phase and in vapor phase

- Compatible with yellow metals
- Corrosion protection in extremely corrosive media

APPLICATION

Use EcoLine® Biobased Grease to lubricate and/or protect

- Metal-to-metal contact areas
- Lubricating sleeves
- Ball and roller bearings
- Vehicle/equipment chassis
- Enclosed hard-to-reach cavities

METALS PROTECTED

- Carbon steel

TYPICAL PROPERTIES

Physical Property		Typical Values
Appearance		Thick Brown Grease
Cone Penetration (ASTM D217)	Worked (x60)	237
	Unworked	258
NLGI Grade		3
Dropping Point (ASTM D566)		185 °C (365 °F)

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT SAFETY DATA SHEET FOR MORE INFORMATION

Copper Strip Corrosion Test (ASTM D4048)	24 h @ 100 °C (212° F)	1a
Rust Prevention (ASTM D5969)	5% Sea Water	Pass/Pass/Pass
Four Ball Wear (ASTM D2266)	1 h, 75 °C (167 °F), 40 kg _r , 1200 rpm	0.51 mm
Four Ball Weld (ASTM D2596)	10 sec, 25 °C (77 °F), 1800 rpm	OK Load: 300 kg _f Weld Load: 320 kg _f
Base Oil Viscosity	40 °C (104 °F)	51 cSt
	100 °C (212 °F)	10.5 cSt
Base Oil Viscosity Index		202
Base Oil Flash Point		326 °C (619 °F)
Vapor-Inhibiting Ability (German Test Method TL 8135-002)		Pass

STORAGE AND PACKAGING

This product is available in 14.5 ounce (428.8 mL) cartridges (12 per carton), 5 gallon (19 liters) pails, and 55 gallon (208 liter) drums.

Minimum storage temperature: 0° F (-18 °C)

Maximum storage temperature: 120 °F (49 °C)

LIMITED WARRANTY

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