



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.



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)

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)

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

LIMITED WARRANTY

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4119 White Bear Parkway, St. Paul, MN 55110 USA
Phone (651) 429-1100, Fax (651) 429-1122
Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com
Internet <http://www.CortecVCI.com>

Supplied by:
www.hitek-ltd.co.uk
+44 (0)1724 851678