



EcoLine® 3220



PRODUCT DESCRIPTION

EcoLine 3220 is an exciting addition to our biodegradable line of products made with renewable resources. EcoLine 3220 is a 99% biobased ready-to-use temporary coating. This canola oil-based product offers a tenacious film that clings to metal surfaces providing excellent contact corrosion protection in storage and shipment. In addition, EcoLine 3220 provides long lasting vapor corrosion inhibition.

Made from renewable materials and containing canola oil as a carrier, this product is environmentally safe, has excellent thermostability, and has no effect on rubber, plastics, or paints.

EcoLine 3220 falls within the USDA BioPreferred Corrosion Preventative Category and is identified for Federal Agency Preferred Purchasing(www.biopreferred.gov).

EcoLine 3220 provides multimetal protection and lubricity in a variety of applications and is especially useful where application is required in freezing temperatures.

FEATURES

- Complete multimetal protection
- Environmentally friendly and biodegradable
- USDA Certified Biobased Product

- Safe for users
- VOC-free
- Provides universal corrosion protection
- Combines film-forming additives with VpCI®s
- Provides excellent anti-corrosion protection in high humidity atmospheres and chloride-containing environments
- Lubricates parts
- Good replacement for mineral oil and flammable solvents
- Low pour point (-18°C)

TYPICAL APPLICATIONS

- Machines and equipment
- Maintenance
- Temporary coating for storage and shipment
- Wire
- Sheet metals
- Pipe
- Flanges
- Gears
- Fabricated or machined parts
- Ballast tank preservation

METALS PROTECTED

- Carbon steel
- Aluminum and alloys
- Copper and alloys
- Cast iron
- Galvanized steel
- Stainless steel

PLASTICS AND ELASTOMERS

These samples have been tested and are compatible:

- Buna N
- Butyl Rubber
- Neoprene
- Silicon Rubber
- Teflon
- EDPM*

*Has to be tested in specific temperature conditions



APPLICATION

EcoLine 3220 is a ready-to-use product and can be applied by dipping, spraying, or brushing at many stages of metal fabrication or for storage and shipment.

EXAMPLE OF INSTALLATION FOR PROTECTION OF BALLAST TANKS

Pump down after pressure washing and removing all foreign materials from the bottom. Use 400-600 sq. ft. per gallon (9.8-14.6 m²/L) of EcoLine 3220 as a basis to get the required amount. Pump the required amount of EcoLine 3220 into the tank and fill with water. This will float the EcoLine 3220; coating every square inch of the tank's interior including ring stiffeners, girders, piping, and side shell with a sufficient amount of product to protect against corrosion. Now that the tank is protected the water may be pumped to the normal ballasted level.

TYPICAL PROPERTIES

Appearance	Clear yellow oily liquid
Non-volatile Content	97-99%
Density	7.6-7.7 lb/gal (0.91-0.92 kg/l)
ASTM D-1748	400 hours

STORAGE AND PACKAGING

EcoLine 3220 is packaged in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. The product should remain sealed during storage. The shelf life of EcoLine 3220 is up to 24 months.

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

TOXICITY DATA

Fresh Water

<u>Rainbow Trout</u>	LC ₅₀ : 1498 mg/L
OECD 203	NOEC: 1000 mg/L
96 hour	LOEC: 1500 mg/L

<u>Daphnia magna</u>	LC ₅₀ : 5464 mg/L
OECD 202	NOEC: 4000 mg/L
48 hour	LOEC: 8000 mg/L

<u>Selenastrum capricornutum</u>	NOEC: 100 mg/L
OECD 201	LOEC: 250 mg/L
72 hour	IC ₂₅ : 129.3mg/L
	(95% CI: 116.7-139.1 mg/L)
	IC ₅₀ : 180.3 mg/L
	(95% CI: 172.2-186.3 mg/L)

Sea Water

<u>M. bahia</u>	NOEC: 3000 ppm
Static renewal test	LOEC: 5000 ppm
(EPA/600/4-90/027F)	LC ₅₀ : 3410 ppm
48 hour	

<u>M. berylina</u>	NOEC: 2160 ppm
Static renewal test	LOEC: 3600 ppm
(EPA/600/4-90/027F)	LC ₅₀ : >10,000 ppm
48 hour	

NOEC-No Observed Effect Concentration
LOEC-Lowest Observed Effect Concentration
LC₅₀-Lethal Concentration 50%
IC₂₅-Inhibition Concentration 25%
CI-Calcineurin Inhibition

LIMITED WARRANTY

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