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Evaluation of Lubriplate Penetrating Oil

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Project #: 13-189-1825

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Purpose: Boris has requested to test chain and cable fluid manufactured by Lubriplate. (see attachment) This product claims to provide corrosion protection.

Sample Received: 1 can of Lubriplate (chain and cable penetrating oil)

Method: 1) ASTM D-1748 (Humidity Testing)
2) ASTM B-117 (Salt Fog Testing)

Materials: 1) EcoLine CLP (batch #20471)
2) VpCI-340CLP (batch #11058)
3) VpCI Super Penetrant (batch #04031)
4) Carbon Steel panels, SAE 1010

Procedure: The following procedure was followed for the humidity and salt fog testing:
1) Carbon steel panels were coated with the products being tested, then hung to drip/dry overnight.
2) Panels were placed in the humidity and salt fog chambers and inspected for corrosion on a daily basis.
3) Record the number of hours until the panels fail. Note- failure is determined by observing one spec of corrosion that is 1-3mm in diameter, or three specs of corrosion at least 1mm in diameter.

Results:

Sample	Time to Failure salt spray testing	Time to Failure humidity testing
Lubriplate	<1 hour	~90 hours
VpCI Super Penetrant	<24 hours (corroded overnight)	300 hours
EcoLine CLP	24 hours	Did not fail (tested for 300 hours)
VpCI-340CLP	24 hours	Did not fail (tested for 300 hours)

Interpretations: Lubriplate offers very little corrosion protection compared to similar Cortec products. VpCI-340CLP and EcoLine CLP provide much better corrosion protection.

Photos:

Salt fog testing
after 24 hours



Lubriplate



VpCI Super Penetrant



EcoLine CLP



VpCI-340CLP

Humidity testing
after 300 hours



Lubriplate



VpCI Super Penetrant



EcoLine CLP



VpCI-340CLP