



Xylan coatings resist chemicals and corrosion...



...are perfect as barrier coatings...



...withstand high-pressure, high-temperatures...



...and have been chosen by engineers since 1969.

Xylan[®] 142X Series

VOC Compliant

Extreme Performance Coatings



General Description

Xylan 142X series fastener-class coatings are waterborne/VOC-compliant, resin-bonded, thermally cured, single-film, dry-film lubricants. They are primarily formulated for use on fasteners and oil tools to prevent corrosion and resist chemicals.

Xylan 1420 has good salt-spray resistance, and protects equipment from chemical exposure (especially those with high pH). Although it contains a small percentage of PTFE lubricant to facilitate installation and prevent galling, we consider it to be a barrier coating rather than a dry-film lubricant.

Xylan 1421 may be used on any part or component to reduce friction, prevent scoring and galling, or provide secondary lubrication in the event of failure of the primary (conventional) lubricant.

Xylan 1424 is a slightly different version that facilitates make-up torque and is available in a wide range of colors.

Xylan 1425 is formulated to withstand extreme pressures (up to 150,000 psi [10,500 kg/cm²]) low-speed applications. This coating uses a unique dual lubrication system of PTFE and MoS₂. Xylan 1425 is impervious to new water-based hydraulic fluids used in offshore oil production. Available in black, blue and green.

Xylan 1427 is similar to 1420, but provides extra corrosion protection while retaining all attributes associated with a composite coating.

Substrate Information

Xylan 142X series can be applied to many types of substrate material such as aluminum, brass, high-alloy steels, carbon steel, stainless steel, titanium and zinc plating.

Use Temperature

Xylan 142X series can be used continuously from -60°F (-50°C) to +350°F (+175°C) and can survive up to +400°F (+204°C) intermittently. If higher temperature service is required, please contact your Whitford representative for recommendations.

Corrosion Resistance

Xylan 142X series applied at 1 mil (25 micron) dry-film thickness, over zinc phosphated steel panels, has exceeded 1500 hours of ASTM B-117 salt fog test. With the same pretreatment, 30 cycles DIN 50018 Kesternich Test (2.0 liters SO₂) are achieved. Both with less than 15% red rust. Xylan 1400 coatings will provide even better corrosion protection when used over a sacrificial primer.

Physical Properties

Pencil hardness 2 - 3 H

Dielectric strength 500 V/mil

Coefficient of friction 0.05 - 0.10

Torque Values

The low coefficient of friction of the coating reduces the torque required to achieve the desired tension preload. Whitford recommends the use of direct tension indicators to determine proper make-up torque for each size or lot of fasteners used on a given application.

Application Instructions

Please refer to the Whitford Product Data Sheet for application information or contact your Whitford representative for more information.

Xylan 142X Series Chemical Resistance	Changes in 142X after 24 hrs exposure
HCl (concentrated) @ room temp.	None
HCl (pH 2) room temperature	None
HCl (pH 2) 125°F	None
NaOH (50%) room temperature	None
NaOH (12.5) room temperature	None
NaOH (pH 9.5) 125°F	None
MEK room temperature	Slight Mark
Toluene room temperature	Slight Mark
Castrol Hydraulic Fluid 200°F	Gloss decrease: 25.6 to 24.1 No loss in coating integrity.
Oceanic HK-540 200°F	Gloss decrease: 29.9 to 10.3. Color lightened slightly. No loss in coating integrity.

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