Xylan® Coating

Xylan® coatings reduce friction, improve wear resistance, protect metal from corrosion, and for non-stick applications which make them ideal for a variety of applications.

Whitford's （Now PPG's）Xylan® is the largest, most complete line of fluoropolymer coatings in the world. Xylan® coatings differ from traditional fluoropolymer coatings in one very important aspect: they are composite materials. Lubricants with the lowest known coefficient of friction are combined with high temperature resistant organic polymers, together they form "plastic alloys" with unique properties.

Xylan Characteristics:

- Coefficient of friction as low as 0.02.
- Superb wear resistance even under extreme pressure.
- Outstanding corrosion and chemical resistance against:
- ◦ Water and Salt Water
- ◦ Acids
- ◦ Bases
- ◦ Solvents
- ◦ Other fluids.
- Wide operating-temperature range from -195°C to +285°C (-385°F to +545°F).
- Flexible curing schedule from ambient to 425°C (800°F).
- Wide range of colors available in many formulations.
- Pliability: Xylan® coatings bend freely and repeatedly without breaking.
- Machineability: After applying multiple coats of Xylan®, some formulations can be machined to fit.
- Excellent adhesion to most metals, plastics, ceramics, wood, and even to itself.

Xylan® Application Process:

1. **Cleaning:** Parts are cleaned to remove all oil, grease & other substances. Cast parts are de-gassed.
2. **Pretreatment:** Parts are pretreated to ensure proper adhesion.
3. **Material Preparation:** Xylan® is rolled at 30 rpm for 30 minutes to ensure the coating has been adequately mixed.
4. **Application:** The coating is sprayed onto the item either manually or on one our automated production lines.
5. **Cure / Bake:** Depending on the coating used the part is cured in an oven at a temperature from 320°F to 815°F.
6. **Inspection:** Parts are inspected to ensure proper application.

Xylan Coating Material Selections.

Through this table,you can select the suitable xylan coating material for your applications.

Product Code	Product Description	Cure Temperature	Operating Temperature	Thickness
Xylan 1006	Xylan 1006 is a resin bonded dry lubricant coating that contains the greatest percentage of PTFE than virtually any other Xylan coating and as a result has excellent non-stick properties and good chemical resistance. However, because of its high PTFE content, it is somewhat softer than other coatings and as a result is best suited for industrial/mechanical applications which do not require a great deal of wear and abrasion resistance. Application examples include molding, components which tend to gall, and items that must function after a period of non-use.	450°F	500°F continuous, 575°F intermittent	0.6 - 1.0 mil (15 - 25 Microns)
Xylan 1010	Xylan 1010 is a dry film lubricant that used on a number of surfaces to reduce friction even at high loads, prevent wear and galling, and provide additional lubrication in the event of the failure of the primary lubricant. In addition to its low coefficient of friction (0.05), it also has very good non-stick release properties, excellent chemical resistance, and the ability to operate at high temperatures. This coating may be cured at a minimum of 450°F, 525°F for better chemical resistance, or 650°F for improved release. Common colors are Black (P01926E) and Medium Green (E0795A).	450° - 650°F	500°F	0.6 - 1.0 mil (15 - 25 Microns)

Xylan 1014	Xylan 1014 contains significantly more bonding resin which produces finishes that are harder, more abrasion resistant, glossier, and less porus. As a result it is an excellent coating for hardware and fasteners as well as machinery exposed to ice and snow which need to be protected from chemicals and corrosive agents, weathering, and abrasives. Common colors are Medium Blue (P01931E), Black (P01937E), Green (E0757A), and Yellow (E2717A).	450°F	500°F continuous, 600°F intermittent	0.6 - 1.0 mil (15 - 25 Microns)
Xylan 1052	Xylan 1052 is formulated for high pressure, low speed, industrial/mechanical wear applications. Its dual lubrant system of PTFE and Molybdenum Disulfide (MoS2) provides lubrication for bearing surfaces up to 150,000 psi. Common colors are Olive Green (E0764A), Green (E0793A), Black (E6850E), and Blue (E9414E).	450°F	500°F	0.6 - 1.0 mil (15 - 25 Microns)
Xylan 1070	Xylan 1070 is a low friction coating used to protect hardware, fasteners, and flanges which operate in salt water and falt spray environments. It contains additives which provide exceptional corrosion protection, compared to Xylan 1010 it offers 40% additonal salt spray protection. Common colors are Black (E10211A), Dark Blue (E10212A), Yellow (E2717B), and Green (P01614E).	450°F	500°F continuous, 600°F intermittent	0.6 - 1.0 mil (15 - 25 Microns)
Xylan 1220	Xylan 1220 contains FEP instead of PTFE which provides excellent non-stick and release properties when used as a coating for molds. It is availible in black and green colors.	400°F	400°F	0.5 - 0.7 mil (12 - 18 Microns)
Xylan 1237	Xylan 1237 offers a low cure temperature (as low as 175°F) which makes it an excellent dry film lubricant for rubber O rings and plastics. It comes in a number of colors such as black, clue, red, white, and orange.	175°F	300°F	0.1 - 0.7 mil (2.5 - 15 Microns)
Xylan 1270	Xylan 1270 is a cheaper alternative to Xylan 1070 but has less lubrication and is also the European version of Xylan 1400.	450°F	500°F continuous, 600°F intermittent	0.6 - 1.0 mil (15 - 25 Microns)

Xylan 1305 and 1315	Xylan 1305 and 1315 is an excellent two coat system that protects valves and chemical process industry hardware from chemical attack. It is unaffected by solvents to 400°F and resists most acids and alkalies. Additionally it is thermally stable to 425°F continuous / 500°F intermittent service which makes it well suited for chemical processing operations.It is only availible in dark colors.	750°F	425°F	0.6 - 1.0 mil (15 - 25 Microns)
Xylan 1331	Contains PPS (polyphenylene sulfide resin) and PTFE for outstanding wear and abrasion resistance. Good for when a highly lubricious nonstick surface is desired.	750°F	450°F	0.8 - 1.0 mil (20 - 25 Microns)
Xylan 1390	Xylan 1390 utilizes graphite as a lubricant instead of PTFE and was developed for use on parts the run in wet wear conditions. Since it does not contain PTFE it can be used as a lubricant in industries where its use is prohibited.	750°F	400°F	0.9 - 1.1 mil (22.5 - 27.5 Microns)
Xylan 1400	Xylan 1400 protects chemical processing industry equipment and hardware from chemical attack and mechanical damage by forming a continuous, impermeable dry film to act as a barrier between the base metal and hostile environment. Common colors are Black (E11521A).	400°F	375°F	0.7 - 0.9 mil (17.5 - 22.5 Microns)
Xylan 1401	Xylan 1401 is similiar to 1400 but includes electrically conductive additives which makes a good solution for dissipating static electricity.	400°F	375°F	0.7 - 0.9 mil (17.5 - 22.5 Microns)
Xylan 1424	Xylan 1424 is a fastener coating used to prevent corrosion and improve make up torque. When applied over zinc phosphate it can withstand 1,500 hours of salt fog. This can be extended even longer if it is applied over a primer such as Xylar 1. Xylan 1424 will withstand most solvents, waters, automotive fluids and fuels up to 200°F and is impervious to new water base hydraulic fluids used in offshore oil production. This coating can be used continuously from -58°F to +350°F. Common colors are Brown (D11810), Yellow (D7813), Orange (D7812), Red (D6580), Green (D6583), Blue (D6584), and Black (D6586).	400°F	350°F continuous, 400°F intermittent	0.6 - 1.0 mil (15 - 25 Microns)

Xylan 1440	Xylan 1440 is good for low-friction, wear protection, and are also resistant to many chemicals found in industrial manufacturing such as automotive fluids, organic solvents, acids, and caustics. Xylan 1440 is similiar to 1240 but is availible in a wider selection of colors.	400°F	400°F	0.7 - 0.9 mil (17.5 - 22.5 Microns)
Xylan 1514	Xylan 1514 provides a durable non-stick finish to products such as personal care items, industrial equipment, and housewares to give an attractive and easy to clean finish.	525°F	475°F continuous, 525°F intermittent	0.7 - 0.9 mil (17.5 - 22.5 Microns)
Xylan 1515	Xylan 1515 is similiar to 1514 but has less PTFE which makes it harder and glossier.	400°F	400°F	0.7 - 0.9 mil (17.5 - 22.5 Microns)
Xylan 1620	Xylan 1620 provides a durable, low-friction wear surface capable of operating at temperatures from -420°F to +500°F and in chemical and corrosive environments. It is an excellent coating for the automotive industry, specifically internal components of engines, pumps, and compressors. It contains additives that increase lubrication and load bearing capability to provide improved efficiency and wear life.	450°F	500°F	0.7 - 0.9 mil (17.5 - 22.5 Microns)
Xylan 1700	Xylan 1700 provides a smooth finish with excellent chemical resistance, non-stick and release which makes it ideal demanding environments such as vessel linings.	750°F	480°F continuous, 550°F intermittent	0.6 - 1.0 mil (15 - 25 Microns)
Xylan 1756	Xylan 1756 is a pure FEP topcoat which can applied over a variety of other Xylan coatings such as 1220, 1840, and 8840 to provide greater release. Excellent for molds, sealing bars, and processing equipment.	700°F	400°F continuous, 450°F intermittent	0.5 - 0.7 mil (12 - 18 Microns)
Xylan 1820	Xylan 1820 provides a smooth finish with good chemical resistance and excellent non-stick and release properties for metal parts that nneed to be formed after the application of the surface (Postforming).	750°F	400°F	0.6 - 0.8 mil (15 - 20 Microns)
Xylan 1840	Xylan 1840 is one of the best non-stick and release coatings in the Xylan family which makes it an excellent solution for coating sealing bars and molds. Sealing bars benefit from its ability to repel melted plastic at elevated temperatures which can be sticky and	750°F	400°F continuous, 475°F intermittent	0.8 - 1.2 mil (20 - 30 Microns)

	troublesome. Molds benefit from its long lasting release properties.			
Xylan 5230	Xylan 5230 is a fastener and small component coating that excels at providing corrosion protection and uniform driving torque for the automotive industry and complies to Chrysler PS-7001, Ford WSD M21 P10 B2 (S303) and WSD M21 P10 B3 (S306), General Motors 6046M, and SAE/USCAR 1 (336+ hours).	425°F	350°F continuous, 400°F intermittent	0.4 - 0.6 mil (10 - 15 Microns)
Xylan 8110	Xylan 8110 is similiar to 1010 but is FDA compliant and is commonly availible in Black (E9314D).	650°F	400°F continuous, 475°F intermittent	0.6 - 0.8 mil (15 - 20 Microns)
Xylan 8840	Xylan 8840 is similiar to 1840 but is FDA compliant.	750°F	400°F continuous, 475°F intermittent	0.8 - 1.2 mil (20 - 30 Microns)