

PRODUCT DATA SHEET

Whitford – Xylan® 1070

1. GENERAL INFORMATION

Product name	Xylan®
Product code	1070
Recommended use	Organic solvent based, low friction coating for studbolts. Normally used over a phosphate or other pretreatment to achieve up to 3000 hours salt spray
Typical applications	Threaded fasteners

2. PRODUCT SPECIFICATIONS

Theoretical solids (% by weight)	25.52 – 43.26
Theoretical solids (% by volume)	15.86 – 23.62
Relative density @ 23° C (g/cm ³)	≤ 1.07 (liquid) / ≤ 1.36 (dry)
Theoretical coverage @ 25 microns (m ² /kg)	5.61 – 7.16
Theoretical coverage @ 25 microns (m ² /litre)	6.34 – 9.45
Viscosity as shipped @ 23° C	40 – 45 s (BS 4), 27 – 30 s (DIN 4), 34 – 38 s (AFNOR 4)
Flash point	> 37.8 ° C
Operating temperature	-195° C to +260° C (continuous); -195° C to +285° C (intermittent)
Dielectric strength	1.5 – 2.0 kV / 25µ

3. SUBSTRATE PREPARATION

Substrates	Most common metals
Substrate preparation	Degrease, gritblast and additional pre-treatment. Ra (mean roughness) 2.5 ± 1.0 microns recommended. Zinc phosphate class IB recommended on mild steel. Heavyweight zinc phosphate recommended. 15 – 20 microns of Xylan 4090 recommended. Warming item to 40° C may facilitate application.
Primer	

4. PRODUCT PREPARATION FOR APPLICATION

Mixing prior to use	Adequately mix material before use. High speed/shear mixing recommended.
Recommended application viscosity	40 – 60 seconds in BS 4 viscosity cup (material at 15 – 30° C)
Viscosity adjustment / thinning	If required, adjust with Whitford solvent 93 in 2% increments.
Filtering	Filter through 100 mesh (150 micron) sieve prior to use.

TECHNIQUE

Application equipment / technique	Spray application. Binks Bullows 630 spray gun, 071 (1.8 mm) nozzle, 65SD1 air cap, stainless steel needle.
Recommended dry film thickness / coat	20 ± 5 microns (typical wet film thickness 100 ± 25 microns)
Number of coats recommended	1 or more. Flash off between coats.
Clean-up solvent	Whitford solvent 91

6. FLASH OFF AND CURE SCHEDULE

Flash-off conditions	5 minutes at 100 – 150° C (212 – 302° F)
Optimum cure schedule	20 minutes at 240° C (465° F)
Minimum cure temperature	30 minutes at 205° C (400° F)
Maximum cure temperature	5 minutes at 345° C (650° F)

METHODS

Dry film thickness	114A – 20 ± 5 microns
Cure test	115B – No white precipitate or stain
Adhesion	132C – No loss of adhesion

8. SHELF LIFE, STORAGE AND HANDLING

Handling	Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Provide adequate ventilation.
Storage	Store tightly closed in a cool, well-ventilated place at 5 – 30° C. 12 months. High speed/shear mix monthly. Increased viscosity or reduced gloss indicates expired product.
Shelf life	