

XTRAFORM FINE/SUPERMATT

Product Data Sheet

UV Curable Texturing Lacquer



DESCRIPTION

XtraForm Fine and **XtraForm Supermatt** are solvent based, UV curable screen printable texturing lacquers. They are designed to enable a range of matt textured finishes to be printed selectively onto XtraForm films using the XtraForm process.

After drying they can be formed to produce deep draw 3D parts, which when UV cured will give a hard, textured finish. They can also be printed onto graphic inks for automotive dial applications.



PRODUCT RANGE

There are currently two finishes, **XtraForm Fine** and **XtraForm Supermatt**. These can be used on their own or blended together to give a custom finish. In addition, **XtraForm Gloss Modifier** lacquer is available to mix with either of the finishes to change the gloss or texture levels and create a wide range of texture and gloss options.

SHELF LIFE AND STORAGE

Shelf life of **XtraForm Supermatt** and **XtraForm Fine** is 12 months whereas the **XtraForm Gloss Modifier** is 6 months from date of manufacture. The shelf life applies to goods stored in cool dry conditions in a sealed container. Once processed this shelf life does not apply. Finished parts can last many years.



PROCESS RECOMMENDATIONS

Method	Recommendations	
Environment	The workroom should be kept clean and dust free. Work areas should be out of direct sunlight, away from windows and shielded from other sources of UV light such as exposure units. Artificial light should use UV-shielded bulbs.	
Handling	Wear protective equipment (safety glasses, gloves and protective clothing) and ensure good ventilation at all times. Ensure nitrile or butyl rubber gloves are worn throughout processing until the lacquer has been fully cured to minimise the risk of sensitisation by skin contact.	
Equipment	Stencil	Use a solvent resistant stencil with Capillex CX/CPS Ultra Cap HD or PLUS 7000/CPS Ultra Coat 535
	Mesh	62 – 120 thread/cm for XtraForm Fine 90 – 150 thread/cm for XtraForm Supermatt
	Squeegee	60 – 75 Shore Solvent Resistant squeegee such as Sericol Duralife or RKS HQ. A 20° angle is recommended.
Printing	<ul style="list-style-type: none"> • Suitable for printing on a flat bed or cylinder press and is designed to be printed onto XtraForm, polycarbonate films and many first surface printed inks. (When printing onto graphic inks, please test the ink chosen to confirm compatibility with the lacquer.) • XtraForm Fine and XtraForm Supermatt should not be left on the mesh when not printing. • To avoid contaminating unused lacquer, never return used XtraForm lacquers to the pot and always replace the lid when not in use. 	
Drying	80 – 100 °C using hot air (jet) drier for a minimum of 2 minutes. Do not bake after drying and Do not air or rack dry	
UV Curing	Lamp	Fusion UV electrode-less lamps using H lamps recommended
	Power	240 W
	Optimum intensity	1.5 W/cm ² (UVA measured using an EIT Powerpuck)
	Dose	Minimum dose 2J (XtraForm)
Storage	Below 25 °C but do not allow to freeze. Allow product to equilibrate with room conditions before use. Printed sheets should be racked not stacked. Where stacking is unavoidable <ul style="list-style-type: none"> • There must be less than 50 sheets in the stack • Do not stack for more than 24 hours 	
Hazards	Refer to MSDS	

A full processing guide is available upon request and must be referred to in designing a process of use with this product.



TYPICAL PROPERTIES

Property	XtraForm Fine	XtraForm Supermatt	Test Method
Gloss ¹ 20° 60° 85°	0.3 to 0.4 GU 2.0 to 4.0 GU 1 to 1.5 GU	0.3 to 0.4 GU 1.0 to 2.0 GU 3.0 to 4.5 GU	ASTM D2457 Black back-printed
Haze	93 % ± 2 %	95 % ± 2 %	ASTM D1003
Total luminous transmission	89 % ± 1 %	92 % ± 1 %	ASTM D1003
MEK spot test ^{2,3}	Pass	Pass	Test method 005
Adhesion ³	Pass	Pass	Test method 080
Pencil hardness ^{3, 4}	F-H	F-H	Test method 058
Heat / humidity resistance ³	7 days at 60 °C / 95 % RH	7 days at 60 °C / 95% RH	Test method 012

Note - results are quoted for **XtraForm Fine** printed through 90 thread/cm mesh and **XtraForm Supermatt** through 120 thread/cm mesh

¹ Gloss level will vary with print deposit

² Tested on XtraForm. Non-hardcoated polycarbonate film will be inherently solvent sensitive

³ For test method details, please contact MacDermid.

⁴ For more information, please refer to MacDermid's statement on pencil hardness testing



CONTACT INFORMATION

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