CytoCure DB TECHNICAL DATA SHEET

OVERVIEW

CytoCure DB is a conformal coating formulated for hydrophobicity, oleophobicity, and prevention of moisture and oxygen ingress. CytoCure is fluorocarbons and PFAS free. CytoCure is transparent, smooth, and forms a hard shell. It is impermeable to gas and corrosive pollutants. This low surface energy coating adheres well to most metals, plastics, and glass. CytoCure DB is colorless and does not alter the color of substrates.

FEATURES

- Chemical resistance
- Hydrophobic
- Solvent resistant

SOLUTION PROPERTIES		
Chemistry	Hydrocarbon siloxane	
Form	Liquid	
Color	Clear - lightly turbid	
Solvent options	Ethyl Acetate, Tert Butyl Acetate, or AS300	
Solids percent	4% to 40%	
Specific gravity	0.8 g/ml	
Flammability risk	ability risk Solvents Ethyl Acetate and Tert Butyl Acetate are flammable. AS300 is not flammable	
Soluble in Water	No	
Dry film toxicity	Non-toxic and non-flammable	
Package options	100 grams in 4 oz. bottle	
	800 grams in liter bottle	
	3000 grams in gallon bottle	

COATING PROPERTIES			
Temperature stability	>500°C		
Odor	Dry film has no odor		
Film Hardness	7H – 9H pencil lead hard		
Refractive Index	~1.4		
Water contact angle	>100°		
Water roll-off	<40° roll-off angle		
Mineral oil contact angle	>20°		
Mineral oil roll-off	<5° roll-off angle		
UV light resistance	No yellowing observed		

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FILM HARDNESS TESTING

CytoCure was tested on 200 µm plastic (PMMA) substrates. The substrate was first plasma cleaned. The sample was rod coated with CytoCure to a wet film thickness of 7.5µm. The coated plastic was left to cure at room temperature for over 12 hours. Pencil hardness tests were carried out with a MXBAOHENG pencil hardness test kit and Staedtler Mars Lumograph calibrated pencil set.

500 grams weight pencil:	7-8H Hard
750 grams weight pencil:	6H Hard
1000 grams weighted pencil:	4H Hard

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