

## MicroCure DTI-002

MicroCure DTI 002 (0.02% solids) is a hydrophobic and oleophobic coating that is transparent, smooth and slippery. The smoothness and low surface energy of this coating makes it suitable for easy to clean (E2C) applications. MicroCure adheres well to most substrates including glass, metal, plastic and painted surfaces. MicroCure DTI is colorless and does not alter the color of most substrates.

### Technical Data

Appearance	Liquid
Color	Clear - lightly turbid
Flammable	Yes
Density	0.9 g/ml
Refractive Index	~1.4
Soluble in Water	No
Hazardous decomposition	> 250°C
Dry film Toxicity	Non-toxic

### Hardness testing:

MicroCure DTI was tested on 200µm plastic (PMMA) substrates. The substrate was first plasma cleaned. The sample was rod coated with MicroCure DTI to a wet film thickness of 7.5µm (dry film thickness 2 nm). 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.

**Table 1. Pencil hardness test results of MicroCure DTI on PMMA**

Tests	Property
500 grams weight pencil:	7-8H Hard
750 grams weight pencil:	6H Hard
1000 grams weighted pencil:	5-6H Hard

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**Table 2. Properties of MicroCure DTI 2 nm film on glass**

Tests	Property
Water contact angle	>100°
Water roll-off	<10° roll-off angle
Mineral oil contact angle	>50°
Mineral oil roll-off	<5° roll-off angle
UV light resistance	No yellowing observed, as good as glass

**Curing:** MicroCure DTI will be dry to the touch after 60 minutes at room temperature. At room temperature complete curing of MicroCure takes 12 hours. At 150°C, the time to cure is approximately 90 minutes.

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