May 2018

Anti-Scratch varnish TE 1-8 Technical data sheet		
Product name:	TE 1-8	
Code:	168790	

1. General

The TE 1-8 varnish is a polysiloxane-based flexible coating protecting against the effects of scratching and abrasion. It is suitable for the coating of POLYAMIDES (e.g. Trogamid®), POLYCARBONATES and CR 39®.

TE 1-8 is used without primer treatment. It can be applied by a variety of techniques followed by a cure cycle at about 75 min at 120°C or 3 h à 80°C for full reticulation. This varnish is easily tintable with usual dyes.

2. Properties

Aspect	Colourless liquid	
Content	29-31% (according to PMC Isochem specifications)	
Density at 20°C	~ 0.95 (according to PMC Isochem specifications)	
Viscosity at 20°C	~ 39 s. (12 mP.s - AFNOR T 30014 Cup n°2.5 – according to PMC Isochem specifications)	
Shelf life*	8 months at -20 ±5 °C 4 months at +5 ±3 ° C 6 weeks at+20 ±5 °C	
Flash point	32°C	
pH (20°C)	4.4-4.8 (according to PMC Isochem specifications)	
Solvents	n-Butanol (58%), Methanol (24%), Ethanol (13%), Eau (5%)	

(*) from production date and including transportation at room temperature

3. Application techniques:

- Dip,
- Flow-coating,
- Spray,
- Rotation.

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4. Application process

Working place:

- Properly ventilated area
- Dust free
- Relative humidity of 30 to 50%

Preparation of the area to coat:

- Wash with a detergent solution in order to get rid of dust, fats or residue of protection
- Ultrasonic cleaning is necessary

Application :

- Varnish temperature
- Varnish filtration

- Dust-free drying

- Curing

15-20°C 1 micron

20 min at 70°C in infrared channel

120 min at 100°C (Polyamide)

75 min at 120°C (Polycarbonate)

Cleaning:

- Current cleaning : wash with n-butanol
- Deep cleaning: wash with 1% aqueous caustic soda

5. Concentration adjustment

- With n-butanol

6. Coating performance

Aspect	Clear and transparent	
Refractive Index	1.5	
Bayer-test	2	
Colorability	Trogamid®: Excellent, Grilamid®: a primer is necessary	
Adhesion	Excellent: no delamination after immersion for 30 min in boiling water	

7. Packaging

1L sample and 5 kg : HDPE Jerrycan - Other upon request

8. Contact

mail : <u>contact@pmcisochem.fr</u> Tel. +33 (0)1 64 99 03 00

The content and data presented are provided purely for information and guidance. Controls and tests are necessary before use

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