DURESTER CG

General information

DURESTER CG is unsaturated polyester based, thixotropic coating for composite tooling applications. Because of its excellent sanding properties, it is best suited for plug finishing. The product is wax free and supplied as non-accelerated, therefore 9% Durester ACG is added before use. The shelf life of accelerated product is approx. 3 months.

DURESTER CG has an excellent curing performance at room temperature. Just within 12 – 16 hours it cures forming a hard and glossy surface that is very easy to finish with water-sanding and polishing.

Key properties

- ✓ significantly less sanding required, starting with 800 – 1000 grit paper (wet)
- ✓ fast room temperature curing
- ✓ styrene resistant
- ✓ good exothermic heat resistance
- ✓ cures thin layers
- ✓ can be thinned with Durester SOL

General properties (23ºC)

Viscocity (DIN cup 4)	30 s
Barcol –hardness [1)]	36 / 45
Curing:	
gel time [min]	60 min
tack free [min]	180 min
sandable [h]	12 - 16 h

[1)] 48h, 23ºC / 24h, 23ºC + 24h, 50ºC

Applications

- ✓ manufacturing high quality plugs for composite industry

FINNESTER COATINGS OY
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Usage

Working conditions

- ✓ all surfaces must be dry
- ✓ the temperature of the ambient air, the substrate and the product should be between 18 – 22ºC during application and curing
- ✓ relative humidity should not exceed 80 %
- ✓ prior to application dust, oil or dirt is removed by appropriate means

Processing equipment and parameters

- ✓ conventional gravity feed spray gun
- ✓ nozzle size: 1,4 mm
- ✓ air pressure: 2,5 bar
- ✓ clean tools with acetone or equivalent

Working steps

STEP 1 Tooling material: Machine to desired shape and dimension.

STEP 2 Spray Durester CG ca. 200 µm wet four to five layers using "wet-to-wet" application technique. Wait few minutes between layers to flash-off. Let it cure at room temperature at least 8 hours, preferably overnight. Sand with 180 – 240 grit paper. Repeat for porous areas if needed.

STEP 3 Spray the second layer of Durester CG 200 - 250 µm wet. Let it cure at room temperature for 10 hours, preferably overnight. Start water sanding with 800 – 1000, continue with finer grit paper and polishing pad until desired gloss level is reached. Apply similar release agents as for standard tooling gel coat.

When the surface is tack-free curing can be accelerated with elevated temperature (max 80ºC). If the curing is accelerated too early entrapment of air and solvent can cause porosity.

To minimise orange peel spray finish, smaller nozzle can be used when extra solvent (Durester SOL) is added. 10% addition of solvent and spraying with 1,2 mm nozzle produces smaller droplets and finer spray mist. Make sure that there are no dry spots left on the surface when spraying.

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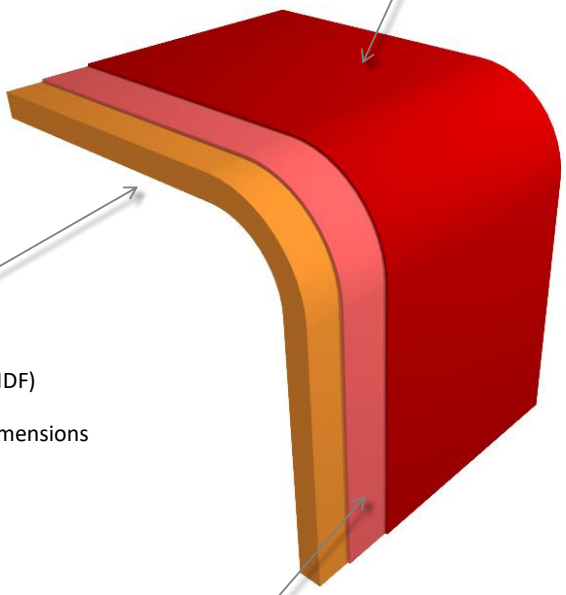

Step 3 | Durester CG

Apply second layer approx. 200 – 250 µm wet. Water sand and polish to desired gloss and apply required release agents.

Step 1 | tooling material (MDF, HDF)

Machine to desired shape and dimensions

Step 2 | Durester CG

Apply approx. 200 – 250 µm. Sand with 180 – 240 grit paper. Repeat for porous areas.

Packaging information

Durester CG – 10 and 20 kg metal pail

Durester ACG – 1 and 10 litre metal pail

Storage & Handling

Store in a cool and dry place avoiding direct sunlight in the original tightly closed pails and drums. Under these conditions the storage life is at least 12 months. Mix well before use. The product contains flammable and volatile solvents. Do not breathe vapor. Keep away from sources of ignition, no smoking. Detailed safety information is contained in a material data safety sheet.

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