



High Solids Epoxy Coating

DUROPLAST 100

DESCRIPTION AND USES

DUROPLAST 100 is a two-component, 92% solids epoxy coating. Applied by conventional means, DUROPLAST 100 hardens to a tough, ceramic-like finish.

For interior use in areas subject to highly abrasive conditions or to high humidity. Also suitable for floor applications and broadcast with aggregates to obtain an anti-slip finish.

CHARACTERISTICS

- Seamless and easy to clean
- Abrasion and chemical resistant
- Federal Department of Agriculture approved
- Can be reinforced with fibreglass material
- TX and HT version are available for floors with "orange peel" textured finish

APPLICATION INSTRUCTIONS

Surface Preparation

Surface must be dry, free of oil, grease, wax and any other contaminant.

In case of doubt or for additional information, contact DUOCHEM.

Application

Recommended primer

Concrete: Solvent reduced DUROPLAST 100 (floors)
DUOCHEMEE or VA (walls)

Gypsum board: DUOCHEM 265

Metal: Cor-Pro 470

Mix part A and part B separately. Thoroughly mix 4 parts A to 1 part B per volume and proceed immediately with the application.

Do not mix a large quantity of material since the pot life will be shortened accordingly.

PRECAUTIONS

- Consult Material Safety Data Sheet prior to use.
- Do not apply material at temperatures lower than 13°C (55°F).

TECHNICAL INFORMATION

Color:	DUOCHEM standard colors	
Solids content:	Per volume	92 %
	Per weight	96 %
V.O.C:	55-60 g/l (0.5 lbs/US gallon)	
Mixing ratio:	4 parts A to 1 part B (hardener) per volume	
Pot life:	45 minutes - 0.5 kg mass (1.1 lbs mass)	
Application method:	Brush, roller, sponge roller or spray	
Number of coats:	2	
Recommended thickness:	150-200 microns dry per coat (6-8 mils dry)	
Coverage:	4.4-6.1 m ² /l per coat (180-245 ft ² /US gallon)	
Recoat time:	6 – 24 hours	
Curing time:	Tack free	6 hours
	Full cure	7 days
Thinning solvent:	DUOCHEM 235 - 5% max. (50 ml/l - 6.4 oz/US gallon) May reduce sag resistance	
Cleaning solvent:	DUOCHEM 201	
Shelf life:	1 year in original unopened container	
Packaging:	3.78 and 18.9 litres (1 and 5 US gallons)	

(over)

TECHNICAL DATA



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PHYSICAL PROPERTIES

Water vapour transmission

Impact resistance
Concrete with fibreglass
Steel with fibreglass
Concrete no fibreglass

Scrubability

Gloss before & after 10,000
cycle scrubability test

Abrasion resistance

Light resistance
100 hours

Tensile strength
(Reinforced with woven fibreglass
cloth)

Tensile strength
(Not reinforced)

Elongation at break
(Not reinforced)

Adhesion

Hardness

Toxicity

Flame spread

Smoke developed

TEST METHODS

CGSB 9-GP-2 or
ASTM E-96, Procedure A

CGSB 1-GP-71
(147.1) or
ASTM D-3029

CGSB 1-GP-71 (125.1)
10,000 cycles

ASTM D-523

ASTM D-4060 (CS-17 wheels)

CGSB 1-GP-71
(120.1) or ASTM E-188

ASTM D-638

ASTM D-638 Type IV
225 microns thick (9 mils)

ASTM D-638 Type IV
225 microns thick (9 mils)

ASTM D-4541 on concrete
on steel

Barcol

Canadian Food Inspection
Agency (CFIA)

CAN/ULC S-102

CAN/ULC S-102

ASTM D-1308, spot test, covered

RESULTS

0.10 perm (No fibreglass)
0.11 perm (With fibreglass)

Unaffected at 0.67 J (6 lbs•in)
Unaffected at 0.79 J (7 lbs•in)
Micro cracks at 1.31 J (11.6 lbs•po)

Unaffected

16% increase

97 mg loss

Colored coating: Unaffected
White coating: Yellowing

92.1 MPa
(13,350 psi)

25.6 MPa
(3,712 psi)

2.8%

1.7 MPa (245 psi)
1.5 MPa (215 psi)

60

Approved

6

110

CHEMICAL RESISTANCE CHEMICALS

Quaternary detergent, detergent 2%, chlorine 65% up to 10.000 ppm, clear
crystal, copper controller up to 200 ppm, clear crystal clarifier up to 250 ppm,
Orvus conc., butter, lard, citric acid 10%, sugar solution 20%, caustic 10%
and conc., ammonia 20%, potassium nitrate 20%, mineral spirits, gear grease,
olive oil, sodium hydroxide 10%, sodium bicarbonate 20%, Oakite 1%, ale,
formaldehyde vapour at 44°C, urine, sour milk, sodium hypochlorite 5%, dry
lime, orange juice, sodium chloride 20%

Coca-cola, lipstick, blood

Acetic acid 5%

Household bleach 10%, potassium chloride 20%, hydrochloric acid 10%

Nitric acid 10%, sulphuric acid 10%

Toluene, acetone
Test report available upon request.

RESULTS

Unaffected

Slightly stained

Slightly softened and discolored

Slightly discoloured

Discolored

Softened and swollen

This information is based on tests we believe to be reliable. Since conditions of use are beyond our control, we do not assume any liability except the replacement of an equal quantity of any product which is proven defective and for which we are responsible.