



ISTANBUL UNIVERSITY  
Engineering Faculty  
Chemical Engineering Department



10.08.2016

**TARDIGRADE PCSL 220**

Two Component, Solvent Free, Polyurethane Based Self-Leveling Coating and  
Waterproofing Material

**Product Information:**

**Appearance / Color**

Resin – part A : grey, liquid  
Hardener – part B : red brown, liquid

**Technical Information**

**Chemical Structure :** Polyurethane

**Density (ASTM D792 / ISO 1183 / DIN 53479)**

Resin – part A : 1.510 kg/l  
Hardener – part B : 1.200 kg/l  
Mixed resin A + B : 1.450 kg/l

**Viscosity (ASTM D2555 / ISO 2555 / DIN EN ISO 2555)**

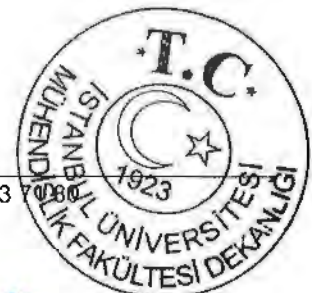
Resin – part A : 5000 mPa·s  
Hardener – part B : (DIN CUP 4) 13 s  
Mixed resin A + B : 1800 mPa·s

**Water Absorption (ASTM D570-98 / ISO 62 / DIN 53495)**

0.001

**Potlife**

42 minutes (23 °C).





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### Mechanical / Physical Properties

TEST	METHOD			VALUE		
				Average	Maximum	Minimum
Compressive strength	ASTM D695	ISO 604	DIN 53454	-	-	-
Flexural strength	ASTM D790	ISO 178	DIN 53452	-	-	-
Maximum force	ASTM D638	ISO 527	DIN 53457	272 N	315 N	234 N
% elongation at break	ASTM D638	ISO 527	DIN 53457	92%	117%	86%
Bond strength	ASTM D7234	ISO16276	DIN 16276	3.37 MPa	4.28 MPa	2.85 MPa
Shore A hardness	ASTM D2240	ISO 868	DIN 53505	82	87	79

Test results for Tardigrade PCSL 220 Two Component, Solvent Free, Polyurethane Based Self-Leveling Coating and Waterproofing Material.





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#### Chemical Resistance:

Chemicals	Values
HYDROCHLORIC ACID 25%	2
HYDROCHLORIC ACID 10%	3
NITRIC ACID 25%	2
NITRIC ACID 10%	2
FORMIC ACID 25%	3
FORMIC ACID 10%	3
ACETIC ACID 25%	3
ACETIC ACID 10%	3
SULPHURIC ACID 25%	3
SULPHURIC ACID 10%	3
LACTIC ACID 25%	3
LACTIC ACID 10%	3
ETHYL ALCOHOL	3
AMMONIA	3
PERCHLOROETHYLENE	3
DIESEL FUEL	3
ACETONE	3
FUEL THINNER	3
HYDRAULIC OIL	3
THINNER	3

Excellent 3 Good 2  
Low 1 Not resistant 0

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