

# product data sheet

VERSION 1.0

# One Component Polyurethane Paint for Waterproofing & Protection.

#### **DESCRIPTION**

**MAC DYE** is a one component polyurethane fluid that cures with the humidity in the atmosphere. It produces a very strong membrane with outstanding adhesion to many types of surfaces and excellent chemical and hvdrolvsis resistance properties.

Ideal for protecting metal structures against corrosion. Suitable for chemicals, effluent treatment tanks, and sewage tubes. It is highly resistant to gases produced during waste water treatment, e.g. methane, hydrogen sulphide etc.

Apply with brush, roller or airless spraying in one or two coats with maximum consumption per coat of 0.150 kg/m2. Thinning is not necessary.

# **MAC DYE**

RECOMMENDED FOR	FEATURES & BENEFITS
Waterproofing and protection of:	☐ Quick curing.
☐ Metal structures	<ul> <li>Excellent adhesion on almost any</li> </ul>
□ Concrete	type of surface.
☐ Industrial Floors	☐ Completely Hydrophobic
☐ Car Parks	<ul> <li>Excellent thermal resistance, the</li> </ul>
□ Refrigeration Units	product never turns soft.
☐ Tanks for Chemicals	Max service temperature 80 o
☐ Waste Water treatment Tanks	Max shock temperature 200 oC.
☐ Pipes (inside)	☐ Excellent mechanical properties, high
	tensile and tear strength, high abrasion
<b>LIMITATIONS:</b> Not recommended for:	resistance.
<ul><li>Unsound substrates</li></ul>	<ul> <li>Excellent chemical resistance.</li> </ul>
<ul> <li>Application in thick coats</li> </ul>	
□ Pigmenting, except for grey. For other	
colours, please refer to our technical	
department	
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## APPLICATION PROCEDURE

Clean the surface using a high-pressure washer, if possible.

Remove oil, grease and wax contaminants.

Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Fill surface irregularities with the necessary product.

#### Priming:

On non-porous substrates: MAC AQUA SEALER

On glassy tiles: MAC PRIMER CRYSTALLINE / SOLID

#### Mixing:

Thinning not necessary.

#### Application:

Apply with brush, roller or airless spraying in one or two coats.

Successive coats are applied before the previous is fully cured in order to maximize adhesion between layers.

Certified quality, environmental and occupational health & safety management systems: ISO 9001/14001 & OHSAS 18001.

MAC DYE/EE/1-1-18



### APPLICATION PROCEDURE

When exposed to sunlight, directly or indirectly, **MAC DYE** has the tendency to discolour (yellowing). To preserve colours, topcoats (always pigmented) is required.

# **CONSUMPTION CLEANING** Maximum per coat: 0.150 kg/m2. Clean tools and equipment first with paper Maximum total: 0.300 kg/m2. and then using SOLVENT. When in continuous contact with Rollers will not be re- usable. chemicals. maximum total: 0.450 kg/m2. **PACKAGING** SAFETY INFORMATION Can be kept for 12 months minimum in the original unopened pails in dry places and at 1 It temperatures of 5-25 oC. Once opened, use as 5 lt soon as possible 20 lt Contains volatile flammable solvents. Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. Keep in mind that solvents are heavier than air so they creep on the floor.

The MSDS (Material Safety Data Sheet) is

available on request.















# TECHNICAL SPECIFICATIONS

In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	сР	ASTM D2196-86, @ 25 oC	110
Specific weight	gr/cm3	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 oC	0.98
Flash point	оС	ASTM D93, closed cup	28
Tack free time, @ 77 oF (25 oC) & 55% RH	hours	20	1-2
Recoat time	hours	.12	2-3

#### The cured membrane:

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	оС	-	-40 to 80
Max. temperature short time (shock)	оС	-	200
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	> 90
Tensile strength at break @ 23 °C	Kg/cm <sup>2</sup> (N/mm <sup>2</sup> )	ASTM D412 / EN-ISO-527-3	550 (55)
Percent elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 10
Water vapor transmission	gr/m <sup>2</sup> .hr	ASTM E96 (Water Method)	0.8
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB- Lamps) & 4hr COND @ 50 °C)	-	ASTM G53	passed (2000 hours)

#### **Chemical resistance tests over 12-month period:**

EXPOSED TO	RESULT
Acetic acid 10%	tiny holes appear after 10 days
Acetone	soft after 10 days
Alcohol 10%	ОК
Ammonia 10%	tiny holes appear after 20 days
Chloride 10%	ОК
Chloride acid 10%	ОК
Citric acid 10%	ОК
Cresol	damaged after 5 days
Distilled water	OK
Drinking water	ОК
Ethyl glycol acetate	OK
Fatty acids	ОК
Formic acid 10%	tiny holes appear after 8 days
Gasoline	ОК
Hydrogen peroxide 10%	ОК
Lactic acid 25%	ОК
Methylene chloride	damaged after 1 day
Nitric acid 10%	ОК
Potassium hydroxide 10%	ОК
Sea water	ОК
Sodium hydroxide 10%	ОК
Sodium hypochlorite 3%	OK

Sugar 30%	ОК
Sulfuric acid 10%	ОК
Tannic acid	ОК
Xylene	ОК



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