

# MasterSeal TC 681

Two-component, UV-resistant polyaspartic elastomeric finish of MasterSeal Traffic 2257, 2272, 2218, 2264, 2205 and 2389 systems.

## MATERIAL DESCRIPTION

MasterSeal TC 681 is a two-component, colored, elastic, high-gloss, fast-curing polyaspartic coating.

## FIELDS OF APPLICATION

MasterSeal TC 681 is mainly indicated as a finish for reinforced concrete floors in multi-storey car parks for both intermediate floors and roofs (MasterSeal Traffic 2257, 2272, 2218, 2264, 2205 and 2389 systems).

## FEATURES AND BENEFITS

MasterSeal TC 681 has the following peculiar characteristics:

- allows the flooring to be put back into operation very quickly (trafficable after 7 hours);
- crack bridging class A4 UNI EN 1504/2;
- resists the aggression of UV rays;
- has a high resistance to abrasion, "dirt pick-up" and impacts;
- withstands the aggressive action of petrol, diesel, acid from car batteries and de-icing salts.

For the technical characteristics, refer to the performance of the entire MasterSeal Traffic 2257, 2272, 2218, 2264, 2205 and 2389 system.

In compliance with the European Regulation (EU No 305/2011 and EU No. 574/2014) the product is provided with the CE marking both according to UNI EN 1504-2 and UNI EN 13813 and the relative DoP (Declaration of Performance).

## CONSUMPTION

0.5 - 0.9 kg / m<sup>2</sup>. For more details, consult the systems MasterSeal Traffic 2257, 2272, 2218, 2264, 2205 and 2389

## PACKAGING

Component	Pack	Kg
A	Can	8,4
B	Can	5,6
Kit		14

## STORAGE

Store the product in a sheltered, dry place at a temperature anywhere between +5°C and +30 °C.

Technical Data	
Packaging	A: 8.4 kg can B: 5.6 kg can
Mixing ratio	100 A / 67 B
Solid content	94%
Viscosity at 20°C	A + B: 700 mPas
Pot life	20°C: 25 minutes
Density	A + B: approx 1.39 kg / liter
Trafficable	20°C: 7 hours
Walkable	20°C: 3 hours
Complete polymerization at 23°C / 50% RH	7 days
Relative humidity tolerated	Max 85%

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## CHEMICAL TRANSPORTATION: CHEMICAL AGGRESSIVE AND RELATIVE GROUP UNI EN 13529

Aggressive chemical	liquid group UNI EN 13529	Aggressive chemical	liquid group UNI EN 13529
1,2-dichloroethane	6	Acetic anhydride	7
Acetaldehyde	7	Maleic anhydride	7
Amyl acetate	7	Aniline	13
Ethyl acetate	7	Antifreeze (ethylene glycol)	5
Acetophenone	7a	Benzene	4a
Acetone	7	Petrol, diesel and hydrocarbons	4
Acetic acid	9	Biodiesel (transesterified lipids)	7b
Acrylic acid	9a	Butanol	5
Adipic acid	9a	Caprolactam (amide)	7
Benzoic acid	9a	Jet fuel	2
Boric acid	10	Kerosene	2
Citric acid	9a	Cyclohexane	4
Hydrochloric acid	10	Chloroform	6a
Chloroacetic acid	9	Benzoyl chloride	6b
Chromic acid	10	Calcium chloride	12
Decanoic acid (capric)	9a	Sodium chloride	12
Heptanoic acid	9a	Cresoli	9
Aluminum sulphate	10	Detergents (acids)	10
Fumaric acid	9a	Phosphoric acid	10
Gallic acid	9a	Dichloromethane(methylenchloride)	6a
Glycolic acid	9a	Dimethylformamide	7
Lactic acid	9	Hexane	4
Lauric acid	9a	Ethanol	5
Maleic acid	9a	Phenol	9
Malic acid	9a	Formaldehyde (formalin)	8
Methacrylic acid	9a	Ethyl acetate glycol	7
Nitric acid	10	Diethylene glycol	5
Oleic acid	9a	Ethylene glycol	5
Oxalic acid	9	Propylene glycol	5
Picric acid	9	Fat	4b
Salicylic acid	9a	Calcium hydroxide	11
Sulfuric acid	10	Potassium hydroxide	11
Stearic acid	9a	Sodium hydroxide	11
Tartaric acid	9	Isopropanol (2-propanol)	5
Thioglycolic acid	9a	Milk	9
Trichloroacetic acid	9a	Brake fluid (polyglycols)	5
Aqua regia	10	Methyl methacrylate	7
Denatured alcohol	4	Methanol	5a
Monochlorobenzene	6b	Methylethylketone	7
N, N-dimethylacetamide	7	Ammonium sulfate	10
Ammonium nitrate	12	Copper (II) sulphate	12
Magnesium nitrate	12	Carbon sulfide	15 a
N-methyl-2-pyrrolidone	13	Styrene	4
Oleum (fuming sulfuric acid)	10	Tetrachlorethylen (perchlorethylene)	6
Mineral oils	3	Carbon tetrachloride	6a
Vegetable oils	4	Tetrahydrofuran	15
Raw oil	4b	Toluene	4
Tar oil	4	Toluene sulfonic	9a
Castor oil (fatty acids)	9a	Turpentine	4

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Aggressive chemical	liquid group UNI EN 13529	Aggressive chemical	liquid group UNI EN 13529
Motor oil	3	Trichlorobenzene	6b
Paraffin	4	Trichlorethylene	6
Phenil Sulfuric Acid	9	Urea	12
Brine (sodium chloride)	12	White spirit (solvent)	4
Methyl salicylate	7a	Xylene	4
Detergents (alkaline)	11	Chlorinated water	12

## CHEMICAL PERFORMANCE UNI EN 1504/2.

**Class I: after 3 days of contact Shore reduction < 50%;**

**Class II 28 days of contact Shore reduction < 50%;**

**Class III 28 days of contact under pressure, Shore reduction < 50%**

Chemical aggressive groups UNI EN 13529		Test liquid	Performance Shore D
1	Petrol	47.5% by volume of toluene 30.4% by volume of isooctane 17.1% by volume of n-heptane 3% by volume of methanol 2% by volume of tertiary butanol	---
2	Aviation fuel	1. 50.0% by volume of isooctane, 50.0% by volume of toluene 2. Aviation petrol 100 LL NATO Code F-18 3. Turbo fuel A-1 NATO code F-34 / F-35	---
3	Unused heating and diesel oil and engine and gear oils	80% by volume of n-paraffin (C12 - C18) 20% by volume of methyl-naphthalene	---
4	All hydrocarbons including groups 2 and 3 except: 4 a) and 4 b) and engine and gear oils used	60% by volume of toluene 30% by volume of xylene 10% by volume of methyl-naphthalene	Classe II (24%)
4a	Benzene and benzene-containing blends (including 2 - 4 b)	30% by volume of benzene 30% by volume of toluene 30% by volume of xylene 10% by volume of methyl-naphthalene	---
4b	Crude oil	10% by mass of isooctane 10% by mass of toluene 20% by mass of heating oil 10% by mass of 1-methyl-naphthalene (95% min.) 47.7% by mass of heavy oil 0.2% by mass of thiophene (99%) 0.3% by mass of dibenzyl-disulfide 0.5% by mass of dibutyl-disulfide (97%) 1.0% by mass of mixture of naphthenic acids (acid value 230) 0.1% by mass of phenol 0.2% by mass of pyridine mixed with 2% by mass of water	---
5	Mono and polyalcohols (up to 48% by volume of methanol), glycol ethers	48% by volume of methanol 48% by volume of isopropanol 4% by volume of water	---
5a	All alcohols and glycol ethers (including 5)	Methanol	Classe I (37%)

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Chemical aggressive groups UNI EN 13529		Test liquid	Performance Shore D
6	Halogenated hydrocarbons [including 6 b)]	Trichlorethylene	---
6a	All aliphatic halogenated hydrocarbons (including 6 and 6 b)	Dichloromethane	---
6b	Aromatic halogenated hydrocarbons	Monochlorobenzene	---
7	All organic esters and ketones (including 7 a)	50% by volume of ethyl acetate 50% by volume of methyl isobutyl ketone	---
7a	Aromatic esters and ketones	50% by volume of salicylic acid methyl ester salicylate 50% by volume of acetophenone	---
7b	Biodiesel	Biodiesel	---
8	Aliphatic aldehydes	35% - 40% of formaldehyde solution	---
9	Aqueous solutions of organic acids up to 10%	10% aqueous acetic acid	Classe I (20%)
9a	Organic acids (except formic acid) and their salts (in aqueous solution)	50% by volume of acetic acid 50% by volume of propionic acid	---
10	Inorganic acids up to 20% and acid hydrolysis salts in aqueous solution (pH <6) except hydrofluoric acid and oxidizing acids and their salts	Sulfuric acid 20%	Classe II (8%)
11	Inorganic bases and their salts with alkaline hydrolysis in aqueous solution (pH > 8) except ammonium solutions and oxidizing solutions of salts (for example hypochlorite)	Sodium hydroxide 20%	Classe II (0%)
12	Solutions of inorganic non-oxidizing salts with pH = 6 - 8	Aqueous solution of sodium chloride 20%	Classe II (15%)
13	Amines and their salts (in aqueous solution)	35% by volume of triethanolamine 30% by volume of n-butylamine 35% by volume of N, N-dimethylaniline	Classe II (13%)
14	Aqueous solutions of organic surfactants	1) 3% of Protectol KLC 50; 2% of Marlophen NP 9.5; 95% water 2) 3% of Texapon N 28, 2% Marlipal O 13/80, 95% water	---
15	Cyclic and acyclic ethers	Tetrahydrofuran (THF)	---
15a	Acyclic ethers	Ethyl ether	---

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## APPLICATION SHEET

For every detail on correct application, always refer to the specific application guide "Application Manual of MasterSeal Traffic systems for waterproofing parking lots".

## TEMPERATURE

The application can take place when the ambient temperature is between 5 and 40°C.

## MIXING

Before mixing, bring components A and B to a temperature between 15 and 25°C.

Pour the entire contents of part B into the container of part A.

Hand mixing is not allowed. Mix with an electric propeller mixer at very low speed (approx. 300 rpm) for not less than 3 minutes.

Scrape the sides and bottom of the container several times to get a thorough mixing.

The mixer blades must always be immersed in the product to avoid introducing air bubbles. Do not work outside the original container.

## APPLICATION

Apply the material by spreading it with a rubber squeegee and then finished using a short-haired roller.

To obtain the best aesthetic effect, it is recommended to apply the product by crossing the coats.

## TOOL CLEANING

The tools used for mixing and applying the material can be cleaned with polyurethane thinner. Hardened material on tools and mixer can be removed mechanically

## WARNINGS

MasterSeal are products for professional use. For further information, consult the Master Builders Solutions Italia Spa area technician.

## SAFETY INSTRUCTION

For information on the correct and safe use, transport, storage and disposal of the product, consult the most recent Safety Data Sheet.

## OTHER SERVICES

For price analysis, specifications, supplementary brochures, references, reports and technical assistance, visit the website [www.master-builders-solutions.com/it-it](http://www.master-builders-solutions.com/it-it) or contact [infomac@mbcc-group.com](mailto:infomac@mbcc-group.com).

Scan the QR code to visit the product page and download the latest version of this datasheet.



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Since 16/12/1992, Master Builders Solutions Italia Spa has been operating under a Certified Quality System compliant with the UNI EN ISO 9001 Standard. Furthermore, the Environmental Management System is certified according to the UNI EN ISO 14001 Standard and the Safety Management System is certified according to the UNI ISO 45001 Standard.

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This version supersedes all the previous ones.