



WATERPROOFING

APPLICATIONS

BRIDGES

PARKING DECKS

ALSAN CIVIL 773 SP

TECHNICAL DATA SHEET 200723SCANE

(supersedes -)

DESCRIPTION

ALSAN CIVIL 773 SP is a three-component polymethyl methacrylate-based (PMMA) waterproofing sprayable liquid membrane. It's flexible at low temperature and is used as a fleeceless waterproofing system. ALSAN CIVIL 773 SP is used as a waterproofing membrane for bridges, parking decks and other civil engineering structures.

RECOMMENDED SUBSTRATE

ALSAN CIVIL 773 SP is used on concrete and steel surfaces previously primed with ALSAN CIVIL P70.

SURFACE PREPARATION

Preparation of concrete surfaces:

1. Concrete must be cured (at least 28 days) with a minimum hardness of 24 MPa (3,500 psi). Substrate should be clean, sound, dry and free of loose materials, grease and any contaminants which may compromise the performance of the product.
2. The concrete surface must be prepared so as to obtain a concrete surface profile (CSP) of 3 or 4 of the *International Concrete Repair Institute* (ICRI). In order to obtain these profiles, shot blasting with steel balls is recommended.
3. The concrete substrate must have a maximum moisture content of 5% (ASTM F2659) or 1.5 kg/100 m²/24 h (ASTM F1869) or an internal content of 75% relative humidity (ASTM F2170).
4. Once the preparation of the concrete surface has been completed, proceed to priming the surface with ALSAN CIVIL P70.

Note: - The substrate temperature must be at least 3°C above the dew point during application and curing.
- Protect all surfaces that are not intended to receive ALSAN CIVIL 773 SP.

Preparation of steel surfaces:

1. Surface preparation for steel substrates must meet Standard SSPC-SP10.
2. Once the preparation of the steel surface has been completed, proceed to priming the surface with ALSAN CIVIL P70.

Note: The surface profile must allow sufficient adhesion of ALSAN CIVIL P70 to steel; a pull-off strength test according to ASTM D4541 may be done to confirm proper adhesion of the primer to the surface.

APPLICATION

MIXING : Using a slow-speed (200 to 400 rpm) mechanical agitator, thoroughly mix both **Part A** and **Part B** of resin for **2-3 minutes** independently without contaminating both parts. Add premeasured **ALSAN RS CATALYST POWDER** to the contents of **Part A** and stir for **2-3 minutes**. Install spray equipment on **Part A** and **Part B**. Refer to *Catalyst Mixing Chart* for additional information.



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The quantity of Alsan RS Catalyst to add is calculated on the quantity of Alsan Civil 773 SP part A to activate. The application must be done by combining an equal amount of activated Alsan Civil 773 SP part A and Alsan Civil 773 part B.

Alsan RS Catalyst quantity table to be added on Alsan Civil 773 SP part A

Temperature range	Alsan RS Catalyst quantity (%wt)*	Alsan RS Catalyst quantity (g) per kg of Part A	Alsan RS Catalyst quantity (g) per litre of Part A	Alsan RS Catalyst quantity (g) per drum of 203 kg (175 L) of Part A
20 °C to 35 °C (68 °F to 95 °F)	4 %	40	46	8.1
5 °C to 20 °C (41 °F to 68 °F)	8 %	80	93	16.2
-25 °C** to 5 °C (-13 °F** to 41 °F)	12 %	120	139	24.4

* Percentage of mass of mixture A + B.

** For applications at temperatures below 0 °C, please contact your SOPREMA representative.

APPLICATION: After mixing, apply a coat of **ALSAN CIVIL 773 SP** with a minimum wet film thickness of 2 mm (80 mils) on the previously primed substrate. The resin should be spread evenly onto the surface. Wait 60 minutes at 20 °C (68 °F) before applying a second layer with a minimum wet film thickness of 1 mm (40 mils). A wet film gauge must be used to determine the applied product thickness.

Application temperatures: -25 °C** to 35 °C (-13 °F** to 95 °F)

FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.

PACKAGING

Specifications	ALSAN CIVIL 773 SP
Physical state	Liquid
Colour	Part A: White Part B: Grey or Blue
Density at 23 °C (73 °F)	Part A: 1.16 kg/L Part B: 1.16 kg/L
Packaging	Part A: 175 L (203 kg) Part B: 175 L (203 kg)

(All values are nominal)



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REACTION TIME

At ambient Temperature (23 °C [73 °F])

Pot life	12 minutes
Rain proof after	20 minutes
Cure time	1 hour

* The pot life depends on the ambient temperature and will be reduced at high temperatures. A higher percentage of catalyst will also reduce pot life. The minimum hardening time is approximate and may vary. The actual hardening speed must be established in the field, depending on the actual conditions of the site.

PROPERTIES

ALSAN CIVIL 773 SP complies with ASTM C957 and ASTM C836 standards.

Properties	Standards	ALSAN CIVIL 773 SP
Shore D hardness	ASTM D2240	> 40
Tensile strength	ASTM D412	> 10 MPa
Elongation at rupture	ASTM D412	180%
Pull-off strength on concrete and steel	ASTM D4541	> 2 MPa
System peeling force at 90°	Internal method	6 000 N/m
Durability testing (Compression resistance with ballast - railway application)	AREMA North American Ballast Test	Pass
Dynamic crack bridging	ASTM C957	Pass
Resistance to chlorides	ASTM C1202	Pass
Water vapour transmission	ASTM E96	0.2 perm
Volume resistivity	ASTM D257	1.0 x 10 ¹⁴ ohms•cm
Surface resistivity	ASTM D257	1.8 x 10 ¹⁵ ohms ²

(All values are nominal)

CLEANING

Tools and equipment can be cleaned with ALSAN RS CLEANER.

STORAGE AND HANDLING

ALSAN CIVIL 773 SP shelf life is 12 months in its original unopened containers. Store in a cool, dry, frost-free place. Avoid exposing containers to direct sunlight and heat. It is important to condition the product to temperatures above 0 °C (32 °F) before and during the application when necessary. Conditioning must be done 48 hours before application.

For more information, refer to the instructions on the container label and relevant safety data sheet (SDS).



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