

ACS POLYURETHANE TC 458®

Polyurethane Based, UV Resistant,
Topcoat Coating



■ Description

ACS POLYURETHANE TC 458® is a polyurethane resin based one-component, UV resistant, solvent based, flexible, topcoat, semi-gloss surface protection material.

■ Place of usage

- As protective topcoat on concrete surfaces.
- As the final coat UV coating in car parkings.
- Epoxy and polyurethane floor coating systems as top coat.
- In polyurethane terraces waterproofing systems as final coat UV coating.

■ Advantages

- Easy to apply.
- Semi-glossy.
- Low viscosity.
- One-component.
- Possibility to apply trowel, roller, airless spray.
- UV and weather conditions resistant.
- Adheres to the surface.
- Elastic.
- Abrasion and chemical high resistance.

TECHNICAL CHARACTERISTICS

ACS POLYURETHANE TC 458® Component A	Polyurethane resin
Color	Various colors of RAL - Semi-Shiny
Density	1,36 ± 0,05 kg/lit (A+B / 20 °C)
Solid Volume	%75 (A+B)
Viskozite	660 cps
Drying Time (+20°C)	12 Hour
Fully Cured (+20°C)	5 Days
Use Time	At least 4 hours
Fire class (DIN 4102)	Class B
Tensile Force at Break (DIN 53504)	4,6 Mpa
Elongation at break (DIN 53504)	% 220
Ambient Temperature	+8°C -+ 35°C
Surface Temperature	+8°C -+ 35°C

NOTE: The above values are given at + 23 ° C and 50% relative humidity environment. High temperatures shorten the time, low temperatures prolong the time.

APPLICATION PROCEDURE / SURFACE PREPARATION

ACS POLYURETHANE TC 458® the surface to be treated must be dry, clean, dust-free and of a certain strength. ACS POLYURETHANE TC 458® should be applied considering the application time of the last application or topcoat application.

MIXING

ACS POLYURETHANE TC 458® is a one component product. It should be ensured that the material temperatures are between + 15 °C and + 25 °C before mixing begins. ACS POLYURETHANE TC 458® single-component epoxy / polyurethane resin should be mixed thoroughly with a mechanical stirrer at 300 - 400

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rpm for 3 - 4 minutes without air dragging. Later, the mixed material is rested and the application is started.

MIXING RATIOS

ACS POLYURETHANE TC 458 [®]	Component A
Mixture Amount	20 kg
Malzeme Yoğunluğu	1,36 kg/liter

APPLICATION METHOD

The ready-to-use **ACS POLYURETHANE TC 458[®]** mixture is applied, preferably by low pressure airless spraying or by roller or by trowel, at a suitable consumption or to obtain the desired dry film thickness.

Consumption 1st coat 400-500 gr/m² and 2 nd coat 400-500 gr/m². Waiting time between the coats is minimum 6-8 hours (20°C) and there is no limit for the maximum. It is very important that the second coat should be applied within the time for over-coating specified above. **ACS POLYURETHANE TC 458[®]** reaches full mechanical and chemical strength in about 7 days.

TIPS TO NOTICE

- The relative humidity of air is highest % 80, Avoid application under excessive heat or wind and/or when the ambient and/or substrate temperature is below +8°C or above +35°C.
- Surface temperature should be 3°C above the then dew point. (Please call our company for the Ambient temperature-Ambient Moisture-Dew Point table.)
- The materials to be used at the appropriate temperatures should be brought and stored in the application area 1-2 days prior to the application and enabled to adjust the ambient conditions.
- In extremely cold conditions, heaters should be used to increase the ambient and the workability of the product, the packages should be preconditioned to +20°C - +25°C to become ready to use. Epoxy and polyurethane based floor coatings should be applied by specialists.
- The reaction and workability times of resin based systems depend on the ambient and substrate temperatures as well as the relative humidity. Under lower temperatures, the chemical reaction times are prolonged and this increases the pot life, coating

interval and the working time. In addition to this, the consumption is increased as the viscosity increases. High temperatures ignite stronger chemical reactions and the above mentioned times decrease accordingly. After completion of the coating, the coating should not fall below + 8 ° C at an air temperature of at least 36-48 hours, and no direct water contact, snow on the newly applied product. Within this period, a contact with water may cause a surface carbonation and/or tackiness both of which will make the coating lose its characteristics.

CLEANING OF TOOLS

Tools and equipment can be cleaned with cellulosic or polyurethane thinner after application. Once cured **ACS POLYURETHANE TC 458[®]** can only be removed by mechanical means.

PACKAGING

Component A: 20 kg metal pails

STORAGE

In unopened original package, it should be stored in a cool and dry environment at + 10 °C + 25 °C temperature protected from the freezing. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

SHELF LIFE

The shelf life is 6 months from the date of production under suitable storage conditions.

SAFETY

During the application, work clothes, protective gloves, goggles and masks should be used in accordance with the Occupational Health and Safety Rules. Due to the irritating effects of uncured materials, the components should not be allowed to come into contact with the skin and the eye. In case of contact, immediately wash with plenty of water and soap. If swallowed, seek medical advice immediately. Food and beverages should not be left at the application areas. Keep out of reach of children.

□ Responsibility

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is only responsible for the quality of the product. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones (06/2019)