

ACS POLYURETHANE TC 420[®]

Polyurethane Based, UV Resistant,
Topcoat Coating



■ Description

ACS POLYURETHANE TC 420[®] is a polyurethane resin based two component high UV resistant semi glossy surface protection material.

■ Place of usage

- Car park areas.
- As the last coat of protective paint systems on concrete and steel surfaces.
- Warehouses.

- Epoxy and polyurethane floor coating systems as top coat.
- On chemical and abrasion resistant surfaces as protective top coat.

■ Advantages

- Abrasion and chemical high resistance.
- Easy to apply.
- To prevent dusting.
- UV and weather conditions resistant.
- Excellent adherence to non-absorbent surfaces.
- High adhesion strength.

TECHNICAL CHARACTERISTICS

ACS POLYURETHANE TC 420 [®] Component A	Polyurethane resin
ACS POLYURETHANE TC 420 [®] Component B	Polyurethane hardener
Color	Various colors of RAL - Semi-Shiny
Density	1,32 ± 0,05 kg/lit (A+B / 20°C)
Solid Volume	%60 (A+B)
Mixing Ratio	10:1 (A:B - By volume)
Applying Time(+20°C)	4 Hours
Recoating	4-5 Hours -20°C
Waiting Between Coats Maksimum	5 Days -20°C
Theoretical Diffusion	8,90 m ² /kg
VOC	360 gr 7 lt.
Thinner	Polyurethane thinner
Suggested Application Thickness	50-80 micron
Ambient Temperature	+8°C -+ 35°C
Surface Temperature	+8°C -+ 35°C

50 micron dry film thickness	Ready to Touch Hard drying	Ready to Touch Hard
5 °C	5 hours	10 hours
15 °C	3,5 hours	8 hours
25 °C	2,5 hours	5 hours
35 °C	1,5 hours	4 hours

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

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APPLICATION PROCEDURE / SURFACE PREPARATION

ACS POLYURETHANE TC 420[®] the surface to be treated must be dry, clean, dust-free and of a certain strength. It is followed times which given for topcoat about undercoat. If it is not followed, surface must be roughened before top-coating and cleaned.

MIXING

ACS POLYURETHANE TC 420[®] is supplied as ready to use kits in the exact ratio. Before mixing, precondition both A and B parts to the temperature of +15 - +25°C. **ACS POLYURETHANE TC 420[®]** A Component contains pigment. Mix with epoxy / polyurethane resin mixer with 300 - 400 rpm mechanical stirrer for 3 - 4 minutes until it is homogenous. After pour the entire contents of B ingredient into the container of A ingredient; make sure that there is no product left in the ingredient B package. Components A and B must be used after homogenous mixing (at least 3 minutes).

MIXING RATIOS

ACS POLYURETHANE TC 420 [®]	Component A	Component B
Mixture Amount	20 kg	2,0 kg
Mixture Density	1,32 kg/liter	

APPLICATION METHOD

The ready-to-use **ACS POLYURETHANE TC 420[®]** mixture is applied, preferably by airless spraying or by roller, at a suitable consumption or to obtain the desired dry film thickness.

Consumption 1st coat 250 gr/m² and 2nd coat 250 gr/m². Waiting time between the coats is minimum 4-6 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 420[®]** 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 be protected from direct contact with water for at least 24 hours. If a water contact, this coating will create on carbonation and softening, which will cause it to lose the properties of the coating.

CLEANING OF TOOLS

Tools and equipment can be cleaned with cellulosic or polyurethane thinner after application. Once cured **ACS POLYURETHANE TC 420[®]** can only be removed by mechanical means.

PACKAGING

Component A : 20 kg pails Component B : 2,0 kg gallon

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 palletes 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 palletes 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)