

OASFLOOR TC-683

Technical Data Sheet

Two component, high solids aliphatic polyurea top coat

DESCRIPTION

OASFLOOR TC-683 is a high solids, aliphatic polyurea coatings based on advanced polymeric materials. It provides excellent abrasion resistance, chemical resistance, weather resistance, and color retention when used as a top coat with recommended **OASIIS** performance flooring system.

PRODUCT HIGHLIGHTS

- Low odor and low VOC
- Excellent UV and weather resistance
- Excellent mechanical properties
- Rapid cure to reduce downtime
- Easy to apply

- RECOMMENDED USES
- **OAS**FLOOR TC-683 is designed for use as a wear resistant finish suitable for trafficked areas in a variety of flooring applications, including podium and car park decks.
- Where color and UV stability are necessary
- Interior or exterior

• Ease of cleanup

PRODUCTION INFORMATION

Composition	0.15-0.2 kg/m ²
Color	Grey and green
Mixing ratio (weight %)	1:1
Solid content	95% above
Specific gravity	1.2
Pot life (25 °C / 55% RH) [†]	30 mins
Tack free time(25 °C / 55% RH) †	40 mins
Full cure(25 °C) ^{\dagger}	7 days

* Consumption will vary according to the nature of the substrate.

† The drying times listed may vary, depending upon film build, color selection, paint and substrate temperature, humidity and degree of air movement.

PHYSICAL PROPERTIES

Property	Result	Test method	
Gloss @ 60° Angle	≥ 80	ASTM D 523	
Pencil hardness	Н	ASTM D 3363	
Adhesion	5B, Excellent	ASTM D 3359	
Impact, <i>N</i> * <i>m</i> (<i>direct</i>)	≥ 20	ASTM D 2794	
Mandrel bend (2 mm)	No Cracks, 180°	ASTM D 522	
Water permeability	W ₃	EN 1062-3	
Humidity resistance – 168 h	Excellent	CNS 11607	



OASFLOOR TC-683

Technical Data Sheet

Two component, high solids aliphatic polyurea top coat

Property	Result	Test method
Salt spray resistance – 168 h	Excellent	CNS 11607
Taber abrasion resistance, mg;	40	ASTM D 4060
CS-17 Wheel, 1000 g load, 1000 cycles		
QUV-UVA(1000 hrs)		
Gloss retention	≥ 85%	ASTM G 154
Delta E	≤ 1.0	
Volatile organic compounds, g/L	< 50	CNS 15039-2
Elongation at break, %	50	ASTM D 412
Tensile strength, kgf/cm ²	180	ASTM D 412
Tear resistance, kgf/cm	80	ASTM D 624
Chemical resistance	10% HCl - no effect	ASTM D 1308
	10% H ₂ SO ₄ - no effect	
	50% Ethylene glycol - no effect	
	50% NaOH – no effect	
	Gasoline - no effect	
	Motor oil – no effect	

*** Note: Results are based on the temperature of 23°C; relative humidity is below 50% and allowed to cure for 7 days.

SYSTEM BUILD UPS

OASCOMPACT 2000 (Medium to heavy traffic)

- Primer OASPRIMER 203
- Wear layer OASFLOOR 401
- Finishing layer OASFLOOR TC-683

PACKAGING & STORAGE

- OASFLOOR Component A 5 kg
- OASFLOOR Component B 5 kg
- The product must be stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between 15-30°C. Store under cover out of direct sunlight and protect from extremes of temperature.
- Shelf life: See label on the package according to the above conditions.

Application

This coating can be applied by roller and brush. Best results are obtained in warm (minimum of 15°C), dry conditions with good ventilation.

Manufacturer:

CHINGTAI RESINS CHEMICAL CO., LTD. No. 50, Gong 2nd, Dajia Dist., Taichung City 43769, Taiwan Version:20200708-1341 JF/RL



OASFLOOR TC-683

Technical Data Sheet

Two component, high solids aliphatic polyurea top coat

LIMITATION

- THIS product contains Isocyanates.
- Do not apply to wet, contaminated or friable substrates.
- Thickness cannot be exceeded 0.4 mm per coat in case to prevent the blister on the surface.
- The coverage will depend on the condition of the surface.

Disclaimer: All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall be linding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information information information agental profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and ChingTai Products makes no claim that these tests or any other tests, accurately represent all environments. **2020 ChingTai Resins Products. All rights reserved.**

Manufacturer: CHINGTAI RESINS CHEMICAL CO., LTD. No. 50, Gong 2nd, Dajia Dist., Taichung City 43769, Taiwan Version:20200708-1341 JF/RL