



POLYURETHANE FLOOR COATING



POLY TI

POLY TI 7100

PRODUCT DESCRIPTION

The POLY TI 7100 is a colored, one component, highly durable, heavy duty aromatic polyurethane floor coating. The POLY TI 7100 is specially designed for use as a thin-layer floor coating, providing high mechanical strength, high abrasion and chemical resistance. Cures by reaction with ground and air moisture.

USES

The POLY TI 7100 is mainly used on concrete floors, on interior surfaces. Due to its long-lasting unchangeable properties is widely used for:

- Car repair garages,
- Car parking areas,
- Warehouses,
- Storage rooms,
- Factories,
- Animal breeding farms,
- Cold storage rooms (Freezers), etc.

ADVANTAGES

- Simple application (roller or airless spray).
- High abrasion resistant.
- Decorative.
- Resistant to constant, heavy abrasion and wear conditions.
- Heat and frost resistant
- When applied does not absorb liquids or dirt.
- Stops the creation of dust.
- Gives a glossy and easy-to-clean surface.
- Chemical resistant.
- Maintains its mechanical properties over a temperature span of -20°C to +90°C.

CONSUMPTION

300-400 gr/m² in two layers.

This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

COLORS

The POLY TI 7100 is supplied in light grey, dark grey and beige. Other RAL colors supplied on request.



TECHNICAL DATA

PROPERTY	RESULTS	TEST METHOD
Composition	Pigmented Polyurethane pre-polymer. Solvent based	
Elongation at Break	>50 %	DIN 53504
Tensile Strength	>3 N/mm ²	DIN 53504
Adhesion to Concrete	>2 N/mm ²	ASTM D 903
Hardness (SHORE D Scale)	20	ASTM D 2240
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Application Temperature	50C to 350C	Conditions: 20°C, 50% RH
Tack Free Time	2-3 hours	
Light Trafficking	12-24 hours	
Final Curing time	7 days	

CHEMICAL PROPERTIES

Potassium hydroxide 5%	+	Sodium hydroxide 5%	+
Ammonia 5%	+	Hydrochloric acid 5%	+
Citric acid 5%	+	Sea water	+
Domestic detergents (diluted)	+	Dichlormethane	-
Diesel fuel	+	N-methyl pyrrolidone (brake fluid)	-

{+ Stable, - Not stable, ±b Stable for a short period.

APPLICATION

Surface Preparation

Careful surface preparation is essential for optimum finish and durability. The surface needs to be grinded with a stone- or a diamond-grinding machine. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the coating. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days. Old coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine.

Possible surface irregularities need to be smoothed. Any loose surface pieces and grinding dust need to be thoroughly removed.
WARNING: Do not wash surface with water!

WARNING: Do not use a metal-ball blasting machine to grind the surface, because the heavy metal-ball impacts destroy the cohesion of the concrete surface and lower its stability.

Repair of cracks and joints

Clean cracks and hairline cracks, of dust, residue or other contamination. Fill all cracks with suitable putty. The next day smoothen the putty surface with a sandpaper or a mechanical grinder.

Absorbent surfaces

Prime absorbent surfaces, like concrete, cement screed and wood with the POLY TI 7000 primer, for the first layer by using a roller, brush or a spray gun.

After 2-3 hours (not later than 4 hours) and while the primer is still a bit tacky, apply the first layer, of the coloured POLY TI 7100 coating. Stir well before using.

Once again allow 3-4 hours for the coating to cure (not more then 4 hours) and apply the second layer of the coloured POLY TI 7100.

Non-absorbent surfaces

Prime non-absorbent surfaces like metal, terrazzo, mosaic, specific types of power-floated concrete and ceramic tiles with the POLY TI 2510 Primer, for the first layer by using a roller, or a brush. After 12 hours (not later than 18 hours) apply the first layer, of the coloured POLY TI 7100 coating. Stir well before using. Once again allow 3-4 hours for the coating to cure (not more than 4 hours) and apply the second layer of the coloured POLY TI 7100.

For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

WARNING: The POLY TI 7100 and/or the POLY TI SYSTEM is slippery when wet. In order to avoid slipperiness during wet days, sprinkle suitable aggregates onto the still wet coating to create an anti-slip surface.

Anti-slip Finish

In order to achieve an anti-slip effect we need to evenly sprinkle corundum (or silica sand) on the first layer of POLY TI 7100 while still wet. When the layer is dry, we brush off any excess aggregate and continue with the application of the second layer of the POLY TI 7100. If necessary apply a third layer of POLY TI 7100, always following the inter-coat time intervals (2-4h).

Packaging

POLY TI 7100 is supplied in 20 kg, 10 kg, 5 kg and 1kg pails. Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5^o-30^oC. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

Safety measures

POLY TI 7100 contains isocyanates. See information supplied by the manufacturer. Flammable. Make sure personal protection (gloves, mask, goggles) are used and ventilation is adequate.

Please study the Safety Data sheet.

PROFESSIONAL USE ONLY.

LOCATIONS

KIGDOM OF SAUDI ARABIA

unitech.ksa@ikkgroup.com

Jeddah

Tel : +966 12 627 8222
Fax: +966 12 627 8722

Jeddah - Ghurab Showroom

Tel : +966 12 667 2000
Fax: +966 12 661 4306

Mak kah/Taif

Tel : +966 12 541 1206
Fax: +966 12 532 1675

Mad inah

Tel : +966 14 842 1095
Fax: +966 14 842 1090

Yanbu

Tel : +966 14 390 1499
Fax: +966 14 322 7101

Khamis Mushayt

Tel : +966 17 237 5929
Fax: +966 17 237 8783

Najran

Tel : +966 17 546 3873
Fax : +966 17 546 3873

Al Baha

Tel : +966 17 237 5929
Fax: +966 17 237 8783

Sharorah

Tel : +966 17 532 8153
Fax: +966 17 532 8153

Gizan

Tel : +966 17 321 6660
Fax: +966 17 321 0665

Riyadh North

Tel : +966 11 415 5465
Fax: +966 11 456 6627

Riyadh South

Tel : +966 11 448 0112
Fax: +966 11 447 7421

Riyadh West

Tel : +966 11 431 6271
Fax: +966 11 431 7642

Riyadh East

Tel : +966 11 448 0112
Fax: +966 11 447 7421

Qassim / Buraidah

Tel : +966 16 382 3946
Fax: +966 16 385 2186

Hail

Tel : +966 16 543 3931
Fax: +966 16 543 3935

Skakah / Qurayyat

Tel : +966 14 626 3904
Fax: +966 14 626 3905

Tabuk

Tel : +966 14 423 5203
Fax: +966 14 423 5203

Hafr el Batin

Tel : +966 13 729 3644
Fax: +966 13 729 3644

Dammam

Tel : +966 13 859 0097
Fax: +966 13 857 8177

Jubail

Tel : +966 13 361 4390
Fax: +966 13 362 4499

Hofuf

Tel : +966 13 530 1474
Fax: +966 13 530 7144

FACTORIES

SFSP - KSA

sfsp.jeddah@ikkgroup.com

Specialized Factory for Steel Products

3rd Industrial City / Jeddah

Tel: +966 12 637 4482
Fax: +966 12 636 1963

SFSP / UAE

sfsp.uae@ikkgroup.com

SIGMA Factory for Steel Products

DIC (Dubai Industrial City)

Tel : +971 4 818 1919

SFSP / Egypt

sfsp.cairo@ikkgroup.com

Specialized Factory for Steel Products

6th of October City Giza

Tel : +20 2 3820 6477
Fax: +20 2 3820 6036

SFSP / Lebanon

sfsp.lebanon@ikkgroup.com

Specialized Factory for Steel Products

Tanayel, Bekaa

Tel: +961 8 514 290
Fax: +961 8 514 291

BAHRAIN

unitech.bahrain@ikkgroup.com

Manama

Tel : +973 17 874 897
Fax: +973 17 789 470

KUWAIT

unitech.kuwait@ikkgroup.com

Kuwait City

Tel : +965 2 4924 937
Fax: +965 2 4924 938

UNITED ARAB EMIRATES

unitech.uae@ikkgroup.com

Dubai - Al Rashidiyah

Tel : +971 4 2591 773
Fax : +971 4 2591 774

Abu Dhabi - Musaffah

Tel: +971 2 552 3393
Fax: +971 2 552 5499

OMAN

unitech.oman@ikkgroup.com

Muscat

Tel : +968 24 591 006
Fax : +968 24 597 006

JORDAN

unitech.jordan@ikkgroup.com

Amman

Tel : +962 6 556 3030
Fax: +962 6 554 7911

Aqaba

Tel : +962 6 556 3030
Fax: +962 6 554 7911

PAKISTAN

unitech.pakistan@ikkgroup.com

Karachi - Clifton

Tel-Fax : +92 21 35826120

EGYPT

unitech.egypt@ikkgroup.com

Cairo 6th of October City

Tel : +20 2 3820 6477
Fax: +20 2 3820 6036

LEBANON

unitech.lebanon@ikkgroup.com

Beirut

Tel : +961 1 858 277
Fax: +961 1 858 276

ENGINEERING, DESIGN, MARKETING & MULTIMEDIA

Unitech Deutschland GmbH

Germany

unitech.germany@ikkgroup.com

Stuttgart

Tel : +49 711 6868 7222
Fax: +49 711 6868 7223

Multi-D s.a.r.l

Lebanon

multi-d@ikkgroup.com

Multi-d Beirut

Tel : +961 1 841 155
Fax: +961 1 841 156

R&D DEPARTMENT

Saih Suhaib-3, Opp DEWA Substation, Dubai Industrial City, Dubai, UAE

Tel : +971 4 818 1944 - Mob: +971 55 517 0841

Email: unitech.uae@ikkgroup.com - abed.demachkieh@ikkgroup.com