



POLY TI AKD PU RUBBER MOLDING SYSTEMS

POLY TI AKD80



PRODUCT DESCRIPTION

POLY TI AKD80 is two components, solvent free, high modulus polyurethane elastomer. It provides excellent elasticity and high tear resistance properties with minimum shrinkage. Cures by reaction (cross linking) of the two components even at very low temperatures.

USES

The POLY TI AKD80 is a specialized elastomeric resin for:

- Production of moulds for use in producing low detail concrete objects, ceramics and side walk plates
- Production of hard-elastic pressing molds for use in the stamped concrete procedure (main surface stamps).
- Production of hard-elastic objects
- Filling / casting applications

ADVANTAGES

- Solvent free
- Shore A 80
- Cold curing
- Minimum shrinkage
- Very high tear strength
- Very high impact strength
- Chemical resistant
- Over 10 years of positive feedback worldwide.

CONSUMPTION

1,2 kg / liter

COLORS

The POLY TI AKD80 is supplied in grey. Other colors may be supplied on demand.

TECHNICAL DATA

PROPERTY	RESULTS	TEST METHOD
Composition	Polyurethane Resin + Hardener. Solvent free.	
Mixing Ratio	A : B = 1 : 3 by weight	
Hardness (Shore A Scale)	80 + 2	ASTM D 2240
Solids Content	100 %	CALCULATED
Temperature strength	80°C (Fully cured)	IN HOUSE LAB
Low Temperature Brittleness	-40°C (Fully cured)	IN HOUSE LAB
Pot Life	5 minutes	Conditions:20°C,50%RH
Tack Free Time	3-4 hours	
Demoulding Time	24 hours	
Final Curing time	7 days	

CHEMICAL PROPERTIES

Water	+	Hydrochloric acid %5	+
Potassium hydroxide %5	+	Styrene	+
Sodium hydroxide %5	+	Sulfuric acid %5	+
Salt water %20	+	Xylene	+
Domestic Detergents	+	DMSO	-
Diesel oil	+	N-Methyl pyrrolidone	-

{+ stable, - unstable, ± stable for a short period.}

APPLICATION

Mould Preparation

Before casting, check that parts or moulds are free of any trace of moisture (Maximum surface moisture content should not exceed 4%).

Before the application of the POLY TI AKD80, the prepared object has to be coated with a suitable liquid-applied mould release agent as the POLY TI AKD99 to avoid bonding with the mould.

Mixing

Stir POLY TI AKD80 Component A well before using. Stir POLY TI AKD80 Component B well before using.

POLY TI AKD80 Component A and Component B should be mixed by low speed mechanical stirrer, according to the indicated mixing ratio in this technical data sheet, for about 2 min if applied manually. Both parts (Component A and Component B) have to be mixed at a temperature higher than 18°C. Component B may be heated to 40oC in order to reduce its viscosity but this will result in a shorter pot life.

ATTENTION: The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail until the mixture becomes fully homogeneous.

Casting

Apply POLY TI AKD80 resin with a brush on the bottom of the mould to avoid entrapped air pockets. After 15-30 min pour POLY TI AKD80 resin into mould.

RECOMMENDATION: Use suitable vacuum to remove entrapped air bubbles.

ATTENTION: Please ensure consumption within the Pot Life.

Prototyping

It is advisable to prepare the object to be copied, by sealing all pores with the POLY TI AKD95 resin, especially if the object is very porous and absorbent.

PACKAGING

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

Please study the Material 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