# DIFFUSION ENGINEERS LTD



#### DIFF TOP

TechnicalData: DIFFCOR/CR/06-18

### **Product Description:**

**DIFF-TOP** is a aliphatic polyurethane based top coat system for external application with various color combination.

Polyurethane based none yellowing for application over intermediate coat of DIFF-CERAGLASS or DIFF-GUARD coating. DIFF-TOP offers best resistance against UV rays for exterior environment.

## **Application:**

DIF-TOP is designed to create seamless, flexible, durable, slip resistant, decorative, and protective Interior surfaces such as mechanical structures, pipelines, work areas, and stalls, display floors, Garage Floors, Industrial Floors, Temperature ranges 20-150°C.

Technology	Polyurethane	
Chemical Type	Polyol / Isocynate	
Appearance(Base)	Red, Blue, Green	
Appearance(Activator)	Clear	
Appearance(Mixed)	Blue, Green ,Red	
Components	Two component-requires	
	mixing	
Mix Ratio, by volume	4:1	
Resin: Hardener		
Mix Ratio, by weight	4:1	
Resin: Hardener		
Cure	Room temperature cure	
Application	PU TOP COAT	

# TYPICAL PROPERTIES OF UNCURED MATERIAL

Base:

Viscosity: liquid
Weight per liter: 1.18 kg/liter

Hardener:

Viscosity: liquid
Weight per liter: 0.98kg/liter

Mixed:

Viscosity Semisolid/paste

Coverage 1 m<sup>2</sup> @ 1mm thick/1kg

#### TYPICAL CURING PERFORMANCE

**Curing Properties** 

Gel Time @ Ambient temp, minutes 55-60

#### **Curing time vs. Temperature**

Ambient temp	20°C	25°C	30°C
Pot life	80-90min	75-80min	55-60 min
Full cure	12-14hrs	10-12hrs	08-10hrs.

Typical cured properties of material

 Hardness shore D (ASTM D2240)
 75-78

 Tensile strength (ASTM D882)
 1500-2000 Psi

 Adhesive strength (ASTM D1002)
 2000-2500psi

 Volume solid
 70%

# SURFACE PREPARATION:

Clean surface to remove oily, rust and any foreign particles. Abrasive blasting with compressed air to achieve surface Preparation of S A 21/2 or Metal surfaces should be grit blasted to a SSPC-SP5 or NACE #1.

#### Mixing:

Mix "base and activator" in specified ration which is supplied in contrasting colors, on clean flat surface. Mix with spatula until a uniform blend free of streaks is obtained.

### Application

The mixed material should be applied using a clean brush or can be spray with pilot gravity gun to the prepared area; application should be carried out as soon as possible after surface preparation is complete.

