

Definition / Tanımlama

PURINSEAL EN 404 is a two-component, low viscosity polyurethane injection resin designed to react in both wet and dry environments. In contact with water, it reacts with the mixture of two components and forms a rigid foam. In dry environment, it reacts to form a rigid and impermeable seal.

Application Area / Uygulama Yeri

- Tunnels
- For filling small voids in mining
- On dam walls
- Used to prevent gas permeability between surfaces
- For filling humid and dry areas

Advantages / Avantajlar

- Activates in anhydrous environments
- Low viscosity
- Solvent-free
- Excellent swelling factor
- High strength
- Short curing time
- Easy to use
- Does not contain VOC, CFC, and halogen
- Excellent penetrability

Technical Properties / Teknik Özellikler

No	Test	Resin / Reçine	Catalyst / Katalizör	Result / Sonuç	Unit / Birim	Test Code
1	Product	PURINSEAL EN 404	PURINSEAL CAT 101			
2	Appearance	Light Yellow	Light Yellow	Amber	-	
3	Density	1,00 - 1,05	0,95 - 1,00	1,08 - 1,13	g/cm ³ (23°C)	ISO 2811
4	Viscosity	500 - 550	50 - 100	300 - 400	cP (23°C)	ASTM 2196
5	Mixing rate	100	117		w/w	
6	Start of reaction	-	-	5 - 10	second	ASTM D 7487
7	End of reaction	-	-	70 - 80	second	ASTM D 7487
8	Curing	-	-	1	hour	ASTM D 7487
9	Expansion	-	-	36 - 40	times	EN 14406
10	Free foam density	-	-	26 - 28	kg/m ³	EN 14406
11	Yield	-	-	30 - 32	liter/kg	EN 14406
12	Tensile strength	-	-	40 - 45	N/mm ²	ASTM D 412
13	Elongation at break	-	-	10 - 12	%	ASTM D 412
14	Adhesion	-	-	2,00 - 2,50	N/mm ²	EN 12618-1
15	Hardness	-	-	70	Shore D	ASTM D 2240

Preparation / Hazırlık

The product prepared in the two-component injection machine should be injected into the placed packers. Since it has two components given as a set, it should not be mixed in the same chamber. When the components come together, they react quickly to form foam.

Application / Uygulama

The product prepared in the two-component injection machine should be injected into the placed packers. The machine pressure should be adjusted according to the viscosity of the product. Otherwise, the materials will not mix in a 1:1 ratio due to the viscosity difference between the components and the material will not come to a suitable form. The product should continue to be injected until the product given to the cracks comes back from the packers. The product applied with the help of packers starts to swell at the appropriate reaction time and fills the gaps.

* Start of reaction with %10 water : 5 - 10 second

* Start of reaction without water : 4 - 5 minutes

Cleaning / Temizlik

After the application, the packers should be removed from the holes. The injection foam flowing from the wall should be cleaned and the holes opened should be covered with mastic. The machine must be cleaned from the injection product inside with a suitable solvent. If there is any product left in the machine, the remaining products may block the machine as they form foam over time. After cleaning with the solvent, the oil should be passed through the machine. Prolonged contact solvent can damage device connections. Therefore, cleaning should be done carefully.

Packing / Paketleme

PURINSEAL EN 404 is shipped as set 10 kg, 20 kg and 25 kg.

Storage / Depolama

PURINSEAL EN 404 is stored in its packaging at a temperature of 5-30 oC without opening the cap, its shelf life is 12 months. Since the product reacts with moisture in the air, it is recommended to use the opened packages completely. Recommended that the half packages you do not use, should be closed very well and if possible, nitrogen gas should be used in the closing process.

Safety and Health / Güvenlik ve Sağlık

PURINSEAL EN 404-B contains isocyanates. Since the product reacts in contact with water, avoid contact with your eyes. Therefore, gloves and goggles should definitely be used while working. Since it is solvent-free, it is not necessary to use any mask especially. If the product comes into contact with your skin, wash with plenty of water and soap. Dispose of the packages after use in accordance with the regulations.

Note

The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Bu teknik formdaki veriler kendi deneyimlerimiz ve bilgilerimiz referans alınarak hazırlanmıştır. Ancak bağlayıcılığı yoktur. Yapıya, uygulama amacına ve özellikle yerel koşullara göre ayarlanmalıdır. Verilerimiz, uygulama sırasında uyulması gereken mühendislik kurallarını referans almıştır. Satış teslim, hizmet şartlarımız ve koşullarımız kapsamında bu verilerin doğruluğundan sorumlu olmaktayız. Çalışanlarımızın bilgilendirme formlarımızdaki yer alan verilerden farklı önerileri ancak yazılı olarak verilmesi halinde bağlayıcıdır. Kabul edilen mühendislik kurallarına her zaman uyulmalıdır.

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