

# TECHNICAL BULLETIN

## Epoxy Grouts Product Selector

Product	Performance								Application					
	Elevated Temp		Flowability		Dynamic Load	Chemical Resistance	Low Creep	High Bearing	Base Plate Foundation	Narrow Clearance	Anchor Bolt			Deep Pour (>6")
	Good	Excellent	Norm	High							SM	MED	LG	
SikaFlow®-648		●		●	●	●	●	●	●	●		●	●	● <sup>1</sup>
SikaFlow®-649		●	●		●	●	●	●	●				●	
SikaFlow®-668		● <sup>2</sup>		●	●	●	●	●		●				
SikaFlow®-678		●		●	●	●	●	●	●			●	●	● <sup>3</sup>
SikaFlow®-690		●		●	●	●	●	●	●				●	● <sup>4</sup>

(1) Consult Technical Service

(2) For chock grouting and use in small pours

(3) Pours up to 18"

(4) Pours up to 9"

### PRODUCT DESCRIPTIONS

#### SikaFlow®-648

High-strength, versatile high-flow grout

#### SikaFlow®-649

High-strength, foundation grout

#### SikaFlow®-668

Epoxy chock grout for mounting equipment

#### SikaFlow®-678

Deep pour, multiple-use epoxy grout

#### SikaFlow®-690

Very high-strength grout

### Description

Sika epoxy grouts are three-component grouts consisting of a two-part epoxy resin and a high-performance blended aggregate. Different products within the range provide solutions for traditional, high flow, anchor bolt, and chock grouting applications.

#### Features

- High early and 7-day strengths
- Epoxy based
- High bond strength
- Variable fill ratio
- High flowability
- Superior physical properties at elevated temperatures

#### Benefits

- Rapid return of equipment to service
- Good chemical resistance
- Bonds to steel and concrete
- Optimum flowability, bearing area, and economics
- Excellent bearing area for even distribution of loads
- Ideal for heat-generating equipment

TECHNICAL DATA		SikaFlow			
PROPERTY	648	649	668	678	690
<b>Compressive strength, psi (MPa)</b>					
73° F (23° C)	14,500 (100)	18,000 (124)	18,300 (126)	13,000 (89)	21,000 (144)
140° F (60° C)	11,500 (79)	7,800 (54)	13,100 (90)	15,000 (103)	26,000 (179)
170° F (77° C)	13,200 (91)	7,000 (48)	13,100 (90)	—	—
<b>Modulus of elasticity, psi (GPa)</b>					
73° F (23° C)	2.5 x 10 <sup>6</sup> (17.2)	2.6 x 10 <sup>6</sup> (18)	2.3 x 10 <sup>6</sup> (16)	7.2 x 10 <sup>6</sup> (50.8)	3.2 x 10 <sup>6</sup> ( )
140° F (60° C)	—	1.8 x 10 <sup>6</sup> (12)	2.1 x 10 <sup>6</sup> (15)	—	—
170° F (77° C)	—	0.4 x 10 <sup>6</sup> (3)	1.7 x 10 <sup>6</sup> (12)	—	—
<b>Creep, in/in (cm/cm), at 600 psi (4.4 MPa)</b>					
140° F (60° C)	4.2 x 10 <sup>-3</sup>	4.0 x 10 <sup>-3</sup>	0.8 x 10 <sup>-3</sup>	4.1 x 10 <sup>-3</sup>	—

<b>Where to Use</b> <ul style="list-style-type: none"> <li>Pulp and paper mills</li> <li>Steel mills</li> <li>Chemical processing plants</li> <li>Machinery, turbine, and compressor grouting</li> <li>Anchor bolt and dowel grouting</li> <li>Crane rail grouting</li> </ul>	<b>PACKAGING AND YIELD</b>		
	<b>PRODUCT</b>	<b>PACKAGING</b>	<b>YIELD FT<sup>3</sup> (M<sup>3</sup>)</b>
<b>Environment</b> <ul style="list-style-type: none"> <li>Grouting where the foundation requires chemical resistance</li> <li>Installations with high early strength requirements</li> <li>Applications with high dynamic loads</li> <li>Repairs where downtime loss is substantial</li> </ul>	<b>SikaFlow®-648</b>		
	54.4 lb unit		0.4 (0.001)
<b>How to Apply</b> APPLICATION 1. Chip foundation. Form using a headbox. 2. Mix resin and hardener first. 3. Mix aggregate with resin. 4. Place grout. 5. Consult specific product data sheet before installation.	Resin	one 5.5 lb pail (2.5 kg)	
	Hardener	one 1.65 lb bottle (0.75 kg)	
	Aggregate	one 47 lb bag (21.3 kg)	
	230 lb unit		1.7 (0.05)
	Resin	one 22 lb pail (10 kg)	
	Hardener	one 6.6 lb bottle (3 kg)	
	Aggregate	four 47 lb bags (21.3 kg)	
	<b>SikaFlow®-649</b>		
	57.4 lb unit		0.43 (0.012)
	Resin	one 5.6 lb pail (2.5 kg)	
	Hardener	one 1.87 lb bottle (0.85 kg)	
	Aggregate	one 50 lb bag (22.7 kg)	
	230 lb unit		1.73 (0.05)
	Resin	one 22 lb pail (10 kg)	
	Hardener	one 7.6 lb bottle (3.4 kg)	
	Aggregate	four 50 lb bags (22.7 kg)	
	<b>SikaFlow®-668</b>		
	59.7 lb unit		0.47 (0.013)
	Resin	one 8.33 lb can (3.78 kg)	
	Hardener	one 1.37 lb bottle (0.62 kg)	
	Aggregate	one 50 lb bag (22.7 kg)	
	<b>SikaFlow®-678</b>		
	240 lb unit		1.8 (0.05)
	Resin	one 16.0 lb pail (7.3 kg)	
	Hardener	one 8.0 lb bottle (3.6 kg)	
	Aggregate	four 54 lb bag (24.5 kg)	
	<b>SikaFlow®-690</b>		
	273.8 lb unit		1.97 (0.056)
	Resin	one 33.32 lb pail (15.15 kg)	
	Hardener	one 5.48 lb bottle (2.49 kg)	
	Aggregate	five 47 lb bag (21.4 kg)	

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## HEALTH , SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [usa.sika.com](http://usa.sika.com), e-mailing your request to technical service or calling 1(800)433-9517. Use only as directed. **IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

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