

### **RESIKON-400** MODIFIED ARYLIC POLYMER

### **TECHNICAL DATA SHEET**

INTRODUCTION	RESIKON 400 is a modified acrylic polymer in emulsion form. It is an excellent material for repair and rehabilitation of different types of structures. It is UV resistant.		
AREAS OF APPLICATION	RESIKON 400 is a useful polymer for addition in cement mortar/concrete as repair and bonding material. It improves flexural strength and bond strength of cement mortar and concrete. It reduces chloride ingress and water absorption, which are sources for corrosion of reinforcement. It is used as water proofing material when mixed with cement mortar.		
FEATURES & BENEFITS	<ul> <li>Being fine particle polymer in emulsion form, it penetrates in the pores, hair cracks, crevices etc. and seals them when it cures.</li> <li>Reduces water cement ratio.</li> <li>Acts as a plasticizer thereby increasing workability of concrete and mortar.</li> <li>Decreases water permeability to a great extent.</li> </ul>		
TYPICAL PROPERTIES	Appearance Type % Solid Content Viscosity by B4 FC at 30°C[sec] pH Freeze/Thaw Stability MFFT Film Formation Chloride (%) Sulphate (%) Specific gravity	<ul> <li>Bluish White liquid</li> <li>Acrylic emulsion</li> <li>45 ± 1</li> <li>13 -17</li> <li>9-11</li> <li>5 Cycles</li> <li>10-12°C</li> <li>Excellent</li> <li>0.02- 0.03</li> <li>0.04- 0.05</li> <li>1.04- 1.06</li> </ul>	

INSTRUCTIONS FOR USE	RESIKON 400 is a modified acrylic polymer used for following applications <i>A] Bond coat</i> For improving adhesion between old and new concrete, application of bond coat is required. For preparing bond coat, mix RESIKON 400 and cement in ratio of 1:1 (1 kg RESIKON 400 and 1 kg cement) <i>B] Polymer Cementitious Mortar</i> Prepare the mortar using the following composition: Cement: 50 kg Sand: 150 kg R-400: 5-10 kg water: 20-25 kg Apply above mortar by hand or by using trowel. <i>C] Seal coat</i> Apply seal coat using mixture of 1kg RESIKON 400 and 1 kg cement. After 24 hours, keep the surfaces moist using water fog for 5-7 days.
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# 1] Compressive strength of polymer modified mortar [RESIKON 400] ASTM D 412

Age	Compressive strength In N/ mm at polymer percentage			
	5 %	10 %	15 %	CONTROL
3 Days	13.9	16.1	20.0	26.0
7 Days	21.7	24.0	30.9	32.9
28 Days	34.0	37.0	43.9	48.3

#### TECHNICHAL PROPERTIES

2] Flexural strength of polymer modified mortar[RESIKON 400]ASTM D

Age	Flexural strength In N/ mm at polymer percentage			
	5 %	10 %	15 %	CONTROL
3 Days	4.1	4.7	4.9	4.1
7 Days	6.3	7.2	7.9	6.2
28 Days	7.3	8.3	8.7	7.2

# 3] Bond strength modified bonding coat N/mm<sup>2</sup>[RESIKON 400]ASTM D 412

Sr.	CONTROL(Cement paste 0.5 W/C ratio)	Cement to Polymer ratio	
		2.5	2.1
1	2.9	3.5	4.1
2	3.2	3.5	4.3
3	3.2	3.6	4.7
4	3.0	3.6	4.5
Average	3.07	3.55	4.42
Percentage	100	115.9	146.3

PACKING	1, 5 and 20 kg in HDPE containers
SHELF LIFE	RESIKON – 400 can be stored in packed condition for one year.
SAFETY DATA	HEALTH HAZARD: RESIKON 400 is basic in nature. It is recommended to take necessary precaution, which one would take while handling alkaline substance. Use rubber hand gloves, splash goggles etc. FIRE HAZARD: By itself it cannot catch fire. If comes in contact with alkali, heat and fumes can get generated.

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DISCLAIMER

This information is given to the best of our knowledge. There is no legally binding assurance of certain properties for a specific purpose. The customer is responsible for determining whether the product and Information provided here is appropriate for his use. It is the sole responsibility of the customer to ensure that any proprietary rights and existing laws and legislation are observed.

#### ANUVI CHEMICALS LIMITED (AN ISO 9001: 2015 COMPANY)

Sales office: 205/210/211, Narmada, Laxmi Industrial Premises, Pokharan Road No.1, Vartak Nagar, Thane - 400 606, Maharashtra. India. Tel.:+91-22-25855379 / 25855714 Website www.resikon.com

