

XIAMETER[®] OFS-0777 Siliconate

Water repellent for masonry surfaces

FEATURES

- Imparts water repellency to a wide variety of substances

BENEFITS

- Reduces water absorption into the substrate, thus reducing spalling due to freeze-thaw and efflorescence, thereby increasing the life of the substrate
- Colorless and non-yellowing protection preserves the natural appearance of the substrate
- Penetrating and breathable
- Low VOC
- Nonflammable

COMPOSITION

- Water-dilutable potassium methyl siliconate solution
- Clear to slightly yellow

APPLICATIONS

- As a surface treatment in applications that utilize its ability to impart a water repellent surface and reduce water absorption
- For use on bricks, sandstone, limestone, and ceramics

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local XIAMETER[®] sales representative prior to writing specifications on this product.

CTM	Test	Unit	Value
0332	Total Solids Content, 90 min at 150°C (302°F)	percent	40-45
0332	Silicone Solids Content	percent	24
0001A	Specific Gravity at 25°C (77°F)		1.29
0090A	Flash Point, open cup	°C (°F)	>93.8 (200)
00077	pH		13
	Density	lb/gal (g/L)	10.8 (1290)
	Solvent (thinner)		Water
	Volatile Organic Compound Content	lb/gal (g/L)	<0.417 (<50)

DESCRIPTION

XIAMETER[®] OFS-0777 Siliconate is a water-dilutable solution of potassium methyl siliconate designed to impart water repellency to a wide variety of surfaces. Supplied at a concentration of 40 percent in water, XIAMETER OFS-0777 Siliconate is usually diluted to a concentration of 3 percent or less before application. The siliconate reacts with carbon dioxide in the air to form an insoluble water-resistant treatment within 24 hours.

percent solution, mix one gallon (3.78 liters) of XIAMETER OFS-0777 Siliconate, as supplied, with 13 gallons (49.2 liters) of water.

Do not use concentrations higher than 3 percent solids unless prior testing indicates a necessity. The use of higher concentrations than required may result in the formation of a white residue on the surface. Users should test the concentration to be applied on the substrate prior to use.

HOW TO USE

As a Surface Treatment

XIAMETER OFS-0777 Siliconate is diluted to a concentration of 3 percent solids or less prior to application. To prepare a 3

After application of the silicone solution, allow the treated surface to dry for at least 24 hours to develop maximum water repellency. This interval may be shortened somewhat by force-drying at temperatures

up to 175°C (350°F). While this removes the water quickly, time must be allowed for the curing reaction between XIAMETER OFS-0777 Siliconate and the surface being treated. Carbon dioxide streams do not appear to reduce the cure time appreciably.

Application Methods

Dilute solutions of XIAMETER OFS-0777 Siliconate can be applied by dipping, spraying, or brushing.

Application Precautions

- Always test the concentration on a small sample of the material to determine the suitability of your specific use.
- Surfaces to receive the water-soluble silicone should be lightly dampened immediately prior to application.
- This water-soluble silicone does not wet surfaces that have been previously treated with silicone or another water repellent treatment.
- When spraying XIAMETER OFS-0777 Siliconate, great care should be taken to protect nearby vegetation or articles from overspray. The material is very caustic. It will damage or kill vegetation and will stain or etch glass, plastic, aluminum and most metals. If contact does occur, wash immediately with water.
- If a white precipitate of potassium carbonate should form because of over-application of the water repellent and washing with water does not remove it, it may be necessary to scrub the surface.

PRODUCT SAFETY INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL, ENVIRONMENTAL, AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE XIAMETER WEB SITE AT WWW.XIAMETER.COM.

STORAGE

Product should be stored at or below 25°C (77°F) in original, unopened containers. The most up-to-date shelf life information can be found on the XIAMETER® website in the Product Detail page under Sales Specification.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. Not intended for human injection. Not intended for food use.

SHIPPING LIMITATIONS

DOT Classification: Corrosive Material.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Table 1: Performance¹ of XIAMETER OFS-0777 Siliconate on Various Substrates

Substrate	% Active Total Solids	% Water Exclusion vs. Control²	% Weight Absorption³
Sandstone ⁴	1.0	93	0.6
	3.0	87	1.1
	5.0	82	1.5
	control		8.6
Limestone ⁵	3.0	74	1.4
	5.0	75	1.3
	control		6.0
Belcrest 760 (Red Brick)	1.0	94	0.4
	3.0	86	0.7
	5.0	86	0.7
	control		6.0
Beldon 691/693 (Gray Brick)	1.0	95	0.2
	3.0	95	0.2
	5.0	88	0.5
	control		4.5
Camfered Cocoa Paver (Dark Red)	1.0	96	0.1
	3.0	89	0.2
	5.0	87	0.3
	control		1.9
Illionois Common Brick (Light Red)	3.0	96	0.7
	5.0	96	0.7
	control		17.2

¹Federal Specification SS-W-110C Testing – sample supported in 1/4 inch (6 mm) of water for 72 hours.

²Calculation is based on weight gain of control.

³Calculation is based on weight of block before soaking.

⁴1" x 1" x 4" (25 x 25 x 102-mm) blocks of Briar Hill sandstone.

⁵1" x 1" x 4" (25 x 25 x 102-mm) blocks of Indian limestone.