

PerformaSil® | 100

SILICONE WATER-BASED ELASTOMER

FEATURES & BENEFITS

- One-component silicone water-based elastomer
- Ultra-low VOCs
- Outstanding weather resistance
- High tensile strength and elongation
- Excellent water and solvent resistance
- Excellent adhesion to a wide variety of substrates
- Ambient or bake cure

COMPOSITION

- 45 wt% polydimethylsiloxane rubber dispersion

APPLICATIONS

- Architectural Coatings
- Water Barriers
- Protective Coatings
- Anti-Graffiti Coatings
- Co-binder to increase weatherability and water resistance

PRODUCT NAME

PerformaSil® 100 Silicone Water-Based Elastomer (SWBE)

PRODUCT CODE

PS12-0001 Clear

MANUFACTURER

ICD High Performance Coatings + Chemistries
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TYPICAL PROPERTIES*

* These values provide general information and are not necessarily part of the product specification

Property	Value	Unit of measure	Test Method
Appearance	White liquid		
Specific Gravity	1.01		
pH	10 - 12		
Viscosity	100 – 200	cPs	ASTM D2196
Non-Volatile Content	45 – 48	%	ASTM D2369
Volatile Organic Content	<25	g/L	EPA Method 24
Tensile strength	3.5	MPa	ASTM D412
	500	PSI	
Elongation	500	%	ASTM D412
Durometer	45	Shore A	ASTMD2240
Water Vapor Permeance	1120	Ng/(Pa·s·m ²)	ASTM E96
	20	US Perm	
Water Vapor Transmission	5.8	g/(h·m ²)	ASTM E96
Air Permeance	<0.001	L/(s·m ²)	ASTM E2178
	<0.0002	cfm/ft ²	75 Pa air pressure

DESCRIPTION

PerformaSil® 100 Silicone Water-Based Elastomer can be used in the formulation of ambient-cure or bake coatings for a wide range of substrates such as masonry, glass, leather, fabric, textiles, and metals. PerformaSil® 100 SWBE exhibits outstanding weather, water, and solvent resistance making it an excellent candidate for exterior coatings in harsh weather conditions. It cures to form a flexible membrane that is impervious to water and many solvents. It can be used alone or as a co-binder with other resins. PerformaSil® 100 SWBE contains silanol functionality which allows it to chemically react with organic resins that contain active hydroxyl groups to form silicone-organic copolymers. These copolymers exhibit improved weatherability and water resistance. As with any product, use of PerformaSil® 100 Silicone Water-Based Elastomer in a given application must be tested (included but not limited to field testing) in advance by the user to determine suitability.

HOW TO USE

PerformaSil® 100 Silicone Water-Based Elastomer may be used as supplied or diluted with water in any quantity. Mix thoroughly before use. Some separation of material may occur.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

STORAGE

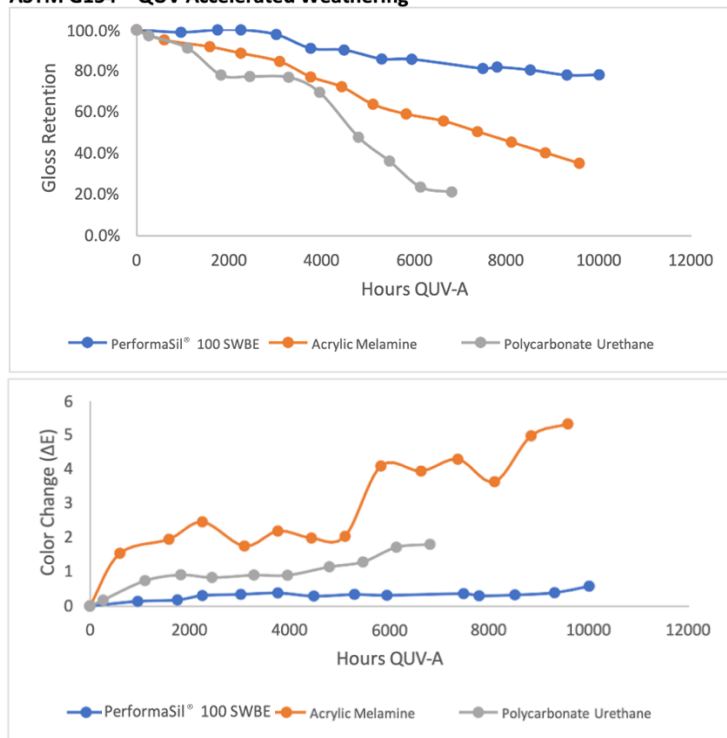
Product should be stored between 5°C and 35°C (41°F and 95°F). Container lids must be securely fastened at all times during storage. Protect material from freezing.

SHELF LIFE

PerformaSil® 100 Silicone Water-Based Elastomer has a shelf life of 2 years from date of receipt at customer, provided the material is stored in sealed original containers at the recommended storage temperature.

TEST DATA

ASTM G154 – QUV Accelerated Weathering



The manner in which you use and the purpose to which you put and utilize ICD High Performance Coatings + Chemistries products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond ICD's control. Therefore, it is imperative that you test ICD's products, technical assistance and information to determine your own satisfaction whether ICD's products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been conducted by ICD. Unless ICD otherwise agrees in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release ICD from all liability, in tort, contract or otherwise, incurred in connection with the use of ICD's products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind ICD. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

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