

TECHNICAL DATA

PRC Rapid Seal® 653

Description

PRC Rapid Seal® 653 is a flexible high-performance sealant intended for use in chemical storage tanks where there will be exposure to a variety of chemicals such as gasoline, crude oil or ethanol.

This material is designed to seal fixed and floating roof systems in and around chemical storage tanks. Other uses are in the chine areas of the tanks to prevent water migration between the steel and concrete base. The cured sealant maintains excellent elastomeric properties after prolonged exposure to gasoline, crude oil or ethanol and water contact. It has a service temperature range from -65°F (-54°C) to 250°F (121°C).

PRC Rapid Seal® 653 is a two-part manganese dioxide cured polysulfide compound. The uncured material is a low-sag, thixotropic paste suitable for application by extrusion gun or spatula. The material can be applied to most typical vertical or overhead joints without sagging. It cures at room temperature to form a resilient sealant having excellent adhesion to steel and concrete.

Application Properties (Typical)

Color	
Part A	Black
Part B	Off-white
Mixed	Dark gray
Specific Gravity	
Part A	1.8
Part B	1.5
Non-volatile content, (2 days @ 158°F)	95%
Mixing ratio	Part A: Part B
By weight	10:100
Base Viscosity	
Brookfield #7 @ 2 rpm	11,000 Poises
Application life @ RT	2 hours
Tack-Free time	< 6 hours
Cure time (35 Shore A)	< 10 hours

Performance Properties (Typical)

Cure Hardness (24 hrs.)	37 Shore A
Cure Hardness @ 2 months	50 Shore A
Tensile Strength (7 day RT)	300 psi
Elongation % (7 days RT)	300 %
Peel strength (7 days RT)	
Steel/Aluminum	62 pli
Peel strength (environmental exposure @ 77°F (25°C), 50% RH)	
Steel/Aluminum peel samples	
Water (7 days)	63 pli
(3 months)	53 pli
Gasoline (7 days)	45 pli
(3 months)	26 pli
Ethanol (7 days)	39 pli
(3 months)	57 pli
Methanol (7 days)	60 pli
(3 months)	53 pli

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

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Surface Preparation

Immediately before applying the sealant or to prime the substrate, the surface should be cleaned well to remove dirt. Contaminants such as dirt, grease, and/or processing lubricants must be removed prior to treatment and sealant application.

A progressive cleaning procedure should be employed using appropriate solvents, and a lint-free cloth. (Reclaimed solvents or paper products should not be used.) Always pour solvent on the cloth to avoid contaminating the solvent supply. Wash one small area at a time. It is important that the surface is dried with a second clean cloth prior to solvent evaporating to prevent redposition of contaminants.

Concrete surfaces need to be sanded or mechanically abraded to obtain a rough surface profile approximately equal to #60 grit sandpaper. All dust and dirt should be removed by vacuum and/or brushing the surface before sealant application.

If the adhesion characteristics to a particular substrate are in question, test samples should be evaluated prior to installation to confirm suitability for use.

Joints to be sealed with PRC Rapid Seal® 653 should have a backer rod installed to control sealant depth to match typical joint design guidelines. Sealant should be tooled after application to ensure good contact of the sealant with the sides of the joint.

Mixing Instructions

Mix according to the ratio indicated in the application properties section. When mixing can kits, mix Part A and Part B separately to ensure uniformity. Next thoroughly mix the entire contents of both parts of the kit together while taking care to avoid leaving unmixed areas around the sides or bottom of the mixing containers.

Packing Options

Packaging and Yield

PRC Rapid Seal® 653 is supplied in 1.5 gallon two-part can kits and 55-gallon drum kits.

Typical Joint dimensions and Sealant Yield per gallon

Joint Size	Sealant yield
½" wide x ¼" deep	154 lin. ft/gallon
½" wide x ⅜" deep	103 lin. ft/gallon
¾" wide x ⅜" deep	68 lin. ft/gallon
¾" wide x ½" deep	51 lin. ft/gallon
1" wide x ½" deep	38 lin. ft/gallon

Storage Life

The storage life of PRC Rapid Seal® 653 in two-part kits is at least 9 months when stored at temperatures below 80°F (27°C) in original unopened containers.

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Material Safety Data Sheet (MSDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

**Additional information can be found at:
www.ppgaerospace.com**

**For sales and ordering information call
1-800-AEROMIX (237-6649).**

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