

SWORL, Inc.

Dedicated to providing innovative solutions and quality service
(512)846-2444 www.sworl.net

PRSI 308 A/B

Technical Data Sheet

PRSI 308 A/B allows the user to spray construct reusable vacuum bags in minutes or over the course of days, for use within hours when dispensed using specifically designed PRSI SSM-3 spray equipment in the SWORL® spray silicone application process.

PRODUCT HIGHLIGHTS:

- Spray applied or extrudable
- Reusable producing hundreds of parts
- High tear strength without the requirement of fabric reinforcement
- High temperature resistance
- Translucent when cured
- For use with low cost pail dispensing spray equipment
- Does not require the use of mold release
- No contaminating transfer (based on aerospace specs)
- Low shrinkage, 100% reactive polymer, no VOC's, no HAP's
- Fast cure 200 second gel time, 45 minutes demold @ 75°F (24°C)
- No odor
- Room temperature cure
- Repairable
- Tacky or wet edge NOT required to be maintained between layers

TYPICAL PRODUCT USAGES:

- Infusion: Polyester, Vinylester, Epoxy, Urethane, Phenolic
- Autoclave / Oven Cure environments: Epoxy, Prepreg, Phenolic
- Prepreg Intensifiers
- Bladders
- Aluminum or prepreg doubling bonding

PHYSICAL PROPERTIES (UNCURED):

	<u>Part A (base)</u>	<u>Part B (catalyst)</u>
Color	Translucent	Blue
Viscosity, cPs	15,000	10,000
Specific Gravity	1.1	1.1
Mix Ratio	10:1 by weight	

PHYSICAL PROPERTIES (CURED):

Color	Blue tint
Hardness, Shore A	28
Tensile strength, psi (N/mm ²) @ .125" (3mm)	800 (5.6)
Elongation %	500
Tear resistance, ppi (N/mm) @ .125" (3mm)	>180 (31)
Linear shrinkage % at full cure	<0.1
Maximum operating temperature, continuous	400°F
Intermittent temperatures	455°F

MIXING GUIDELINES:

PRSI 308 A/B is formulated to be spray dispensed or extruded using PRSI SSM-3 meter mix equipment. The equipment is preset to dispense the correct mix ratio. Please refer to the PRSI SSM-3 specification sheet for additional information.

SPRAY AND CURE CHARACTERISTICS:

Spray and cure properties will be negatively impacted when using PRSI 308 A/B at temperatures below those recommended.

	60° F *	75° F	90° F	105° F
GEL	18m	3m	1m	<1m
DEMOLD	120m	45m	25m	15m
CURE	36 hrs	240m	120m	75m

* Not recommended due to slow Gel times and potential vertical sag of material.
m = minutes

MOLD PREPARATION TIPS:

TEST BEFORE YOU SPRAY

This system contains a platinum catalyst which when mixed with the base causes curing. The platinum in this system will preferentially react with many contaminants commonly found in the work place becoming unavailable to react with the silicone base. This situation is commonly referred to as cure inhibition. In instances where the platinum is no longer available for the reaction, the mixed silicone will remain sticky. In some cases exposing the mixture to elevated temperatures will drive the product to cure. Materials found to cause cure inhibition are some organic polymer systems, chlorinated solvents or carriers, and some substrates. Especially troublesome materials include: amine cured epoxies, sulfur cured organic rubber systems such as natural rubber, polysulfide rubber, latex rubber including gloves, latex coatings, latex paints, adhesive tape (i.e. duct tape), condensation cure silicones, RTV, silicone caulking, cured urethane elastomers, uncured composite pre-preg, heavy moisture, nitrile gloves, super glue (cyanoacrylates), sulfur containing modeling clays, polyester gel coats, polyester paints, bondo, PVC coated surfaces, acetone, MEK (methyl ethyl ketone) and tin catalyzed silicone RTV rubbers. A patch test is recommended on all surfaces suspected to cause cure inhibition should be conducted to determine compatibility prior to making a bag.

TIPS FOR EXTENDING BAG LIFE:

Ultimate bag life is impacted by a number of variables. **PRSI BLE 070** is a combination cleaner and bag life extender. Used as needed, **PRSI BLE 070** can extend bag life yielding up to 30% more parts. Tips for extending bag life is to allow the bag to cool to ambient temperatures between cycles; to remove the bag from the part as soon after exotherm as possible; and exposing the bag off of the part to temperatures of 250°F and above. Please contact SWORL, Inc. directly for your specific repair requirement in a PRSI 308 A/B bag. **PRSI BLE 070** is a product offered by SWORL, Inc.

STORAGE AND HANDLING:

PRSI 308 A/B is warranted to meet our product specification and to be free of defects for a period of 12 months from the date of manufacturer when stored in the original unopened container at 75° F.

NON – WARRANTY Except for a warranty that the materials supplied substantially comply with the data presented in the Manufacturer's latest bulletin describing the product, "All Materials are sold AS-IS, and without any warranty expressed or implied as to merchantability, fitness for a particular purpose, patent, or any other matter. In no event shall Manufacturer's liability for damages exceed manufacturer's sale price of the particular quantity with respect to which damages are claimed.

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