



300 East Cherry Street • North Baltimore, OH 45872  
Phone: 419.257.3561 Fax: 419.257.2200  
www.dsbrown.com

## Product Data Sheet

# DSB 900™ SL Silicone

### READ BEFORE USING THIS PRODUCT

**GENERAL:** DSB 900™ SL is a low modulus silicone which offers the performance and durability characteristics of conventional silicone with the ease of installation of self-leveling materials. DSB 900™ SL is supplied as a ready-to-use, one-component moisture curing system that provides a lasting and flexible seal. DSB 900™ SL offers outstanding weathering resistance, remains flexible down to temperatures as low as -50°F (-46°C), is jet-blast resistant and will maintain field serviceability when exposed to intermittent fuel and oil spills. It bonds strongly to concrete joints without the use of a primer. DSB 900™ SL can be used in all typical concrete joint applications on highway and airfield pavements in all climates. DSB 900™ SL is compatible with asphalt pavement. DSB 900™ SL is easily applied to concrete joints using bulk dispensing system units such as those available from manufacturers including Pyles/Graco and Johnstone. The leveling characteristics insure that the required joint wetting for development of appropriate adhesion occurs during application, no tooling is required.



**SPECIFICATION CONFORMANCE:** DSB 900™ SL is formulated for **highway, airport, parking structures and bridge joints** where high movement occurs. DSB 900™ SL conforms to specifications for low modulus silicone for many highway departments and federal agencies. The product also meets and exceeds all requirements of ASTM D5893. "Standard Specification for Cold-Applied Single Component, Chemically Curing Silicone Sealant for Portland Cement Concrete Pavements" for type SL sealants.

**APPLICATION:** The unit weight is 10.7 pounds per gallon (1.28 kg/L). Product yield will vary depending on thickness of sealant, waste, application techniques, etc. For good adhesion, the joint interface must be sound, clean and dry. Prior to use, the user must read and follow Application Instructions for DSB Silicone Sealants (January 2005) to verify proper product selections, applicator pumps, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each drum of sealant.

**PACKAGING:** DSB 900™ SL Sealant is packaged in plastic lined open head 55 - gallon (208 L) drums that contain 50 gallons (189 L) of material. Additionally, for small applications the sealant is available in plastic 5 - gallon (19 L) pails that contain 5 gallons (19 L) of material.

**WARRANTY:** The D.S. Brown Company warrants that DSB sealants meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing are beyond our control as are the use and application of the sealants; therefore, The D.S. Brown Company shall not be responsible for improperly applied or misused sealants. Remedies against The D.S. Brown Company, as agreed to by The D.S. Brown Company, are limited to replacing nonconforming product or refund (full or partial) of purchase price from D.S. Brown. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by D.S. Brown, whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow D.S. Brown recommendations for sealant installation.**



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### PROPERTIES of DSB 900™ SL

<u>ASTM D5893 Physical Requirements</u>	<u>ASTM D5893 SL Requirements</u>	<u>DSB 900™ SL Requirements</u>
Cure Evaluation	Pass at 21 days	Pass at 21 day max.
Rheological Properties (ASTM C63)	Type 1, smooth level surface	Type 1, smooth level surface
Extrusion Rate (ASTM C1183)	Type S, 50 ml/min. minimum	Type S, 200 ml/min. minimum
Tack Free Time (ASTM C 679)	5 hr. max.	3 hr. max.
Effects of Heat Aging (ASTM C 792)	10% max. Loss	10% max. Loss
Bond, -29°C (-20°F), 100% extension		
Non-Immersed	Pass 5 Cycles	Pass 5 Cycles
Water Immersed	Pass 5 Cycles	Pass 5 Cycles
Oven-Aged	Pass 5 Cycles	Pass 5 Cycles
Hardness (ASTM C 661)		
-29°C (-20°C), Type A2	25 max.	10 max.
23°C (73°F), Type 00	30 min.	40-80 min
Flow	No flow	No flow.
Rubber Properties in Tension		
Ultimate Elongation	600% min.	800% min.
Stress at 150% Elongation	310 K pa (45 psi) max.	207 K pa (30 psi) max.
Effects of Accelerated Weathering	Pass 500 hours	Pass at 5000 hours
Resilience	75% min.	75% min.

### ADDITIONAL PROPERTIES of DSB 900™ SL SEALANT:

Specific Gravity (ASTM D792-A)(1)	1.10-1.40
Adhesion to Concrete (MIL 8802)(2)	20 pli (3.5 kg/cm) min.
Bond and Movement Capability +/-50% (ASTM C719)(2)	Pass 10 cycles
Bond to Mortar (AASHTO T132)(2)	50 psi (34.4 N/cm <sup>2</sup> ) min.
Tensile Adhesion, %(ASTM D5329)(3)	600% min.
Flame Resistance (SS-S-200)	Pass

Notes:

1. Specimens shall be obtained from 1/8 inch (3mm) thickness sheets of material which has been cured for 7 days at 77+/- 3°F (25+/- 2°C) and 50 +/- 5% relative humidity.
2. Specimens cured for 28 days at 77 +/- 3°F (25 +/- 2°C) and 50 +/- 5% humidity prior to testing.
3. Specimens shall be ½" x ½" x 2" (1.2cm x 1.2cm x 5/0cm), cured 7 days at 77 +/- 3°F (25 +/- 2°C) and 50% +/- 5% relative humidity.