

PRODUCT DATA SHEET

1. PRODUCT DESCRIPTION

Blackhawk™ is a plural component Urea spray-in-place elastomer, designed for high pressure equipment. This product provides a flexible but extremely tough monolithic membrane.

2. USES

Blackhawk™ is a fast cure, texture surface, purpose-built material designed for automotive applications such as pickup truck bed liners. It exhibits excellent adhesion to most materials and is suitable as a protective-abrasive impact liner for cement, wood, and metal surfaces. Blackhawk exhibits excellent qualities for military applications.

3. PHYSICAL PROPERTIES

Durometer Hardness (Shore A), <i>ASTM D-2240</i>	85 - 95
Density (pcf), <i>ASTM D-1622</i>	55
Tensile Strength (psi), <i>ASTM D-2370</i>	1500+
Abrasion Resistance, taber, <i>ASTM D4060</i>	0.3% / 1000 cycles
Elongation, <i>ASTM D-2370</i>	210% minimum
Tear Strength (pli), <i>ASTM D-1004</i>	250 pli minimum
Moisture Vapor Transmission, Perms (<i>Eg6</i>)	0.025 @ 30 mils

4. PROCESSING CHARACTERISTICS

Component Temperature at Spray Head - A side	145° - 160°F
- B side	145° - 160°F
Minimum System Pressure	2000 psi
Gel Time	15-18 seconds
Cure Time	24 hours
Recommended Application Temp Range	40°F - 90°F

5. PRODUCT APPLICATION PARAMETERS

PROPERTY	TEST METHOD	"A" SIDE	"B" SIDE
Specific Gravity	ASTM D-1638	1.09	1.019
Viscosity	Brookfield LVF	400 cps +100	400 cps +100
Mixing Ratio	By Volume	1	1
Mixing Ratio	By Volume	51	49
Pounds per Gallon	From Specific Gravity	9.08	8.49
Temp. @ Spray Gun	n/a	145°F	145°F

continued on next page

5. PRODUCT APPLICATION PARAMETERS (cont)

PROPERTY	TEST METHOD	"A" SIDE	"B" SIDE
Gel Time	String	15-18 seconds	15-18 seconds
Dry to Touch	Touch	24 seconds	24 seconds
Total Cure	n/a	24 hours	24 hours
Product Working Temp.	non-immersion	-40°F to 200°F	-40°F to 200°F
Relative Humidity	n/a	MAX 85%	MAX 85%

The value ranges stated in this Technical Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.

6. APPLICATION REQUIREMENTS

General: Spray equipment must be designed to produce a minimum of 2000 psi with an output of 1.5 gallon per minute. The heating component of the equipment must be able to maintain a temperature at the gun of 150 °F. The hose on the equipment must be heated and be rated a minimum of 3,000-psi burst pressure. The spray gun must also be rated at the pressures and throughputs required.

Substrate Parameters: The substrate must be dry! A minimum of 5°F above the dew point is mandatory. The ambient relative humidity should not be above 85%. Pin holing may occur if the above parameters are not strictly followed. Applicator shall check initial climatic conditions. A small area shall be sprayed and check for proper application. Applicator may continue, if upon close inspection, the sprayed sample meets quality standards.

Coverage: The material theoretically will cover 1,604 square feet per 100 gal drum set at 100 mil dry film thickness. Coverage of the substrate should include a waste factor based on conditions at the site and type of substrate to which the material is being applied.

7. DISCLAIMER

The data presented herein is not intended for use by nonprofessional applicators, or those persons who do not purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent test in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer.

8. TRANSPORTATION & SHELF LIFE

This material is sensitive to cold temperatures. Material shall be maintained above 45°F (7°C) during transport for material preservation. Shelf life is one year from date of shipment, in original, unopened factory containers, under normal storage conditions of 60°F to 95°F (18°-36°C).

9. SAFETY

Review SDS at www.PhoenixLiners.com. Basic safety for personal protection is:

- Long sleeve overalls or disposable Tyvek overalls
- Splash shield or safety glasses with splash guards
- Rubber gloves
- Respirator / Supplied Air System / Headsock
- Do not take internally; wear rubber or leather boots
- Do not use near high heat or open flame
- Keep out of reach of children

10. TECHNICAL SUPPORT SERVICES

Technical Services, Sales, and Customer Support: (713) 854-4858

11. WARRANTY

Phoenix MCBS, LLC will repair or replace product it finds to be defective provided the product has been used properly. Except as expressly stated above, the Company makes no warranty of merchantability and no warranty of fitness for any particular purpose, nor does it make any warranty, expressed or implied, of any nature whatsoever with respect to the product or its use. In no event shall the company be liable for delay caused by defects, for loss of use, for indirect, special or consequential damages, or for any charges or expenses of any nature incurred without its written consent.