



## S-46 MODIFIED POLYUREA JOINT SEALANT

### PRODUCT DESCRIPTION:

S-46 is a two-part Polyurea joint filler system consisting of a base compound and an activator. When mixed together, S-46 forms a rapid curing self leveling joint sealant. S-46 is designed for 10-15% movement of an installed joint width. The cured compound has excellent impact resistance and adhesion to steel, aluminum, glass, and ceramics, concrete and wood. It is highly recommended that concrete be cured for a minimum of 28 days prior to installing joint filler. S-46 is resistant to attack by mild acids, alkalis, corrosive salts, alcohols and aliphatic hydrocarbons. S-46 has a higher elongation with greater flexibility and a softer composition. S-46 meets and exceeds the Shore A requirements according to ASTM D2240.

### USES:

Summitville S-46 is designed specifically for industrial floor applications receiving heavy vehicle traffic, such a forklift or steel wheeled carts. S-46 is used to fill interior random repair cracks, control joints, or new construction joints on horizontal concrete surfaces. S-46 is flexible, accommodating to small slab movement yet strong enough to protect the vertical edges of concrete/brick/tile/stone from spalling under most impact/loading conditions. S-46 can be used in exterior applications where minor joint or crack movement from thermal cycling will occur. S-46 is also recommended and designed to assist as a repair material for cracks and damaged control joints in existing processing facilities. S-46 bonds well to all Summitville brick and tile products for a superior movement joint. S-46 can be used in metal treatment facilities, sanitary waste, laboratories, dairies, beverage production, breweries, chocolates production, meat processing facilities, and packaged meals processing facilities. S-46 is also ideal for cold storage facilities, freezers, and food processing plants where time and temperature are serious considerations.

### ADVANTAGES:

S-46 is formulated to be a 100% solids compound. That means it contains no VOC's and it is odorless with minimal toxic vapors. S-46 is flexible with high elongation strength at both ambient and cold temperatures. Suitable ranges for cured material are -40°F to 200°F+ conditions.

### TECHNICAL DATA:

Physical Properties	
Tear Strength (lb/in) <i>ASTMD624</i>	150 - 300
Modulus of Elasticity (psi) <i>ASTM D638</i>	400 - 900
Tensile strength (psi) <i>ASTM D638</i>	600 -1200
Tensile Elongation (%) <i>ASTM D638</i>	240 - 500
Gel Time, <i>ASTM D1640</i>	~1 minute
Tack Free, <i>ASTM D1640</i>	2 - 3 minutes
Open to Foot Traffic, <i>ASTM D1640</i>	60 minutes
Adhesion to concrete (psi) <i>ASTM D4541</i>	300 - 450
Shore A Hardness <i>ASTM D2240</i>	≥75
Mix Ratio	1:1
VOC	0
Taber Abrasion, mg wt loss (1000g, 1000 revs, H-18) <i>ASTM D4060</i>	375 - 500

*\*Values stated above are under ASTM controlled conditions. Equipment configurations and/or field application conditions may produce variances in final system values.*

### LIMITATIONS

S-46 should not be used to fill exterior cracks, control joints, or construction joints if deck or slab movement from thermal cycling is expected. Not recommended for use under non-breathing, resilient, or polymer flooring systems. Consult national building codes for applications when used in a cold

environment and/or freezer applications. S-46 is an aromatic based polyurea, discoloration from exposure to ultraviolet light may occur, however the physical properties are unaffected. S-46 cures quickly as a polyurea; protect brick/tile/stone/concrete/steel/aluminum/glass/polymer/etc. edges from drips and overfilling before attempting to fill movement, expansion, control, soft joints in the final covering.

**MIXING AND PREPARATION:**

Surface Preparation: All joints to be filled with Summitville’s S-46 must be clean and dry. Any debris such as but not limited to oil, dirt, paint and any other material that may be a bond breaker must be removed. To ensure joint is ready the final cleaning step must include the complete removal of all residues with a vacuum cleaner and oil-free compressed air. All joint facings must possess an open surface texture with all curing compounds and sealers removed. If this product will be used for filling floor cracks, the cracks must be routed out and cleaned before filling. For proper installation and to protect brick/tile edges, all edges must be squared off and filled as much as possible as S-46 will flow, level and recess slightly as it cures.

Note: To provide proper load transfer in joint backing, Summitville S-46 must be filled to the full depth of the stone, brick, tile, concrete, polymer floor joint or crack. **Do not use backer rod** or other fill material for the purpose of reducing volume. Dried silica sand, 1/16” to 1/8” (1.5 to 3 mm), may be used to fill the crack at the bottom of the joint to prevent material loss through the slab.

**Preparation of 10 gal units:**

Mixing: Due to its extremely fast set time, Summitville S-46 requires machine mixing and placing. **\*\*Slowly pre-mix Part A separately before using with a slow speed drill and mixing paddle for 2 to 3 minutes. Do not whip air into the Part A while mixing.** Follow mechanical pump manufacturer’s equipment instructions for operation.

Machine dispensing: Use 1:1 ratio pump with or without heater as required for individual application.

**CAUTION:**

S-46 expansion joint sealant is designed for industrial use only. It contains materials that could present handling and potential health hazards to certain individuals. Consult Safety Data Sheets (SDS) and the container labels for complete precautionary information before using. Basic safety for personal protection includes but is not limited to a respirator, rubber or leather boots, splash shield or safety glasses with splash guards, Rubber gloves and Long sleeve or disposable Tyvek® overalls. Users must understand the applications, safety requirements, and proper handling techniques to ensure proper use of this material.

**CLEAN-UP:**

Cured product may be disposed of without restriction. Excess liquid ‘A’ & ‘B’ material should be mixed together and allowed to cure, then disposed of in the normal manner. Product containers that are “drip free” may be disposed of according to local, state, and federal laws.

**COVERAGE:**

Lineal feet per gallon: Calculated

JOINT DEPTH	JOINT WIDTH				
	1/4"	3/8"	1/2"	3/4"	1"
1/4"	249	193	138	92	64
1/2"	138	103	68	45	34
3/4"	92	68	45	30	23
1"	64	48	34	23	17
1 3/16"	52	39	27	19	14

Lineal feet per 600ml Cartridge: Calculated

JOINT DEPTH	JOINT WIDTH				
	1/4"	3/8"	1/2"	3/4"	1"
1/4"	32	28	24	16	11
1/2"	24	17	11	8	6
3/4"	16	12	8	5	3
1"	11	8	6	3	2
1 3/16"	9	6	5	2.5	1.6

**PACKAGING:**

- 10 gallon unit contains: 5 gallon (Bucket part A) and 5 gallon (Bucket part B)
- 600 ml Cartridges: 300ml of ‘A’ side and 300ml of ‘B’ side packaged as a duplex cartridge. Ten cartridges per case.