TuffTex Materials
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High Performance, Semi Rigid, Sealant
(ASTM C920, Type M, Grade P, Class 50)

DESCRIPTION:
RepSeal 50 is a 50% movement, two component, Jet Fuel & Chemical Resistant, 1:1 ratio, self-leveling, polyurethane / polyurea joint sealant. **RepSeal 50** provides a long-lasting flexible weather tight seal and may be applied to clean dry surfaces without risk of gassing or bubbling. It is a self-leveling, self-curing, non-priming sealant.

FEATURES:
- Hand Applied or Machine Dispensed
- Conforms to Federal Specification SS-S-200E
- Easily Shaved
- Rapid Cure & Self Leveling
- 1 Hour return to service
- 100% Solids, Highly Elastic,
- Zero VOCs
- UV Resistant
- Self-Leveling & Non Toxic
- Remains Flexible, Even in Cold Temperatures

TYPICAL USES:
- Airport Runways
- Bridge Headers
- Parking Apron, Refuel Pits
- Parking Decks, Expansion Joints

COLOR:
Gray or Black

PACKAGING:
20-oz. (600 mL) Cartridge
10-gallon kit: 2- 5 gal pail (18.9 liters) Side-A and B
100-gallon kit: 2- 50 gal drum (189 liters) Side-A and B

SURFACE PREPARATION:
Allow concrete to cure 28 days before installation.
The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance, or other surface contaminants. Concrete surfaces may require a light sandpaper finish equal to or greater than an ICRI CSP #1-3. Surface preparation may be completed with the use of **TuffTex PrepEtch**. **(See PrepEtch Brochure)**

PRIMING:
The use of primer is optional. Consult **TuffTex** for priming conditions! If primer is required, **TuffTex** recommends the use of **RepPoxy PA** primer.
Polyethylene rod or polyurethane foam is recommended as a joint-filler and backup material when required.

TECHNICAL DATA:
ASTM C-920, Type M, Grade P, Class 50, Use T
Meets SS-S-200E (section 4.4.12) Flame Test Requirements

HAND APPLICATON MIXING:
RepSeal 50 may not be diluted under any circumstance. Premix **RepSeal 50** Side-B material before combining with Side-A. Note: Side-A material requires no mixing. Add Side-A to Side-B while mixing, using a mechanical mixer with a low speed drill and "Jiffy" Mixer blade. Mix until a homogeneous mixture and color is attained (at least 3 minutes). Use care to scrape the sides of the container to ensure that no unmixed material remains. Use caution not to whip too much air into the material as this may result in pinhole blisters or shortened pot life.

APPLICATION:
For smaller applications, apply using a cartridge gun, hand pressure-type, or pour from container. This material can be applied at environmental temperatures from -20°F (-29°C) to as high as 135°F (57° C). The product needs to be pre-conditioned at 75-80°F (24-26°C) prior to use for best results.

Metered Dispensing:
For larger applications, use the metered **AST GMP-025** continuous flow pump. Equipment usage and maintenance instructions as well as installation supervision is supplied **TMI** as the beginning of all projects. (See AST Equipment Use Guide)

CLEAN-UP:
Clean all tools and equipment with **Xylene** or **RepGreen**. Cured product is inert and may be disposed of without restriction. Mix excess Side-A and Side-B material and allow to cure. Check local, state, and federal laws before disposing of material.

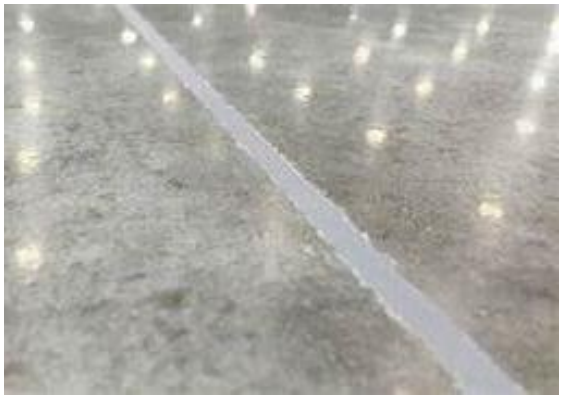
STORAGE:
RepSeal 50 has a shelf life of 24 months from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).
NOTE: Material approximately sets in 1-hour at 70°F (21°C). Colder temperatures will slow the cure. Warmer temperatures will speed up the cure. Return to service time is typically 1-hour or less at 70°F (21°C).

LIMITATIONS:
- Do not use in cracks, construction joints or control joints if surface is subject to thermal cycling.
- Discoloration can occur if exposed to **extreme** UV; however, no change will occur in the physical properties.

PHYSICAL PROPERTIES:	
Specific Gravity	A-Side:1.02 + 0.1 B-Side:1.27 + 0.1
Viscosity at 80ºF (26°C)	A-Side: 2000 ± 300 cps B-Side: 3000 ± 300 cps
Mixed Viscosity-D-2196- 74^{0}F	400-800-cps
Mixing Ratio by Volume	1:1 (1A:1B)
Solids Content ASTM D2369	100%
Adhesion to concrete @ 7 days ASTM D4541	250 psi (1.7 MPa)
Tack-Free Time @ 77ºF (25ºC) 50% RH	7-15 Minutes
Cure Time @ 75ºF (24ºF) 50% RH	48-72 Hours
Hardness-Shore A ASTM D-2240	50 ± 5
Tensile Strength ASTM D-412	400 ± 50 psi (2.7 ± 0.3 mPa)
Tear Strength ASTM D-624	150-250 pli
Elongation, ASTM D-412	500 ± 100%
Concrete Adhesion C794 Primed with **RepPoxy PA** Unprimed	 30 pli 25 pli
Shrinkage	Negligible
Cyclic Movement Capabilities Class 50 – C-920	Passes 10 cycles No loss- adhesion
Shave Window	1 to 24 hrs.
Traffic Ready	1 to 2 hrs.

Coverage Rates (Linear Feet / Gallon)

Depth of Joint (in.) \ Width of Joint (in.)	1/4	3/8	1/2	5/8	3/4	7/8	1
1/4	308	205	154	123	102	88	77
3/8	205	136	102	82	68	58	51
1/2	154	102	77	61	51	44	38
5/8	123	82	61	49	41	35	30
3/4	102	68	51	41	34	29	25
7/8	88	58	44	36	29	25	22
1	77	51	38	30	25	22	19



Chemical Resistance
ASTM D1308

Acetic Acid, 10%	No effect
Alcohol, 10%	No effect
Ammonium Hydroxide, 10%	No effect
Brake Fluid	Swelled, Softened
Hydroxide, 10%	No effect
Toluene	No Effect
Diesel Fuel	Discolored
Ethylene Glycol (antifreeze)	No effect
Gasoline	Stained
Hydrochloric Acid, 20%	Slight swelling
JP-4 Jet Fuel	No effect
Used Motor Oil	Stained
Salt Water	No effect
Sodium Hydroxide, 10%	Slightly discolored
Sulfuric Acid, 10%	No effect
Xylene	No effect

WARRANTY:
Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either **TuffTex Materials, Inc.,** or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

Joint Sealants	TXDOT
RepSeal SL: 1 & 2 part, self leveling, hybrid polyurethane concrete sealant	
RepSeal NS: 1 & 2 part, non sag hybrid polyurethane concrete sealant	
RepSeal AC: 1 part, self leveling, hybrid asphalt & concrete sealant	**Class 3**
RepSeal LD: 1 part, self leveling loop detector sealant	**DMS 6340**
RepSil SL & NS: 1 part self leveling and non sag silicone pavement sealant	**Class 4,8**
RepSil FS: 1 part Fast Setting silicone bridge sealant	**Meets Class 7**
RepJoint PF-UV: Preformed UV resistant polyfoam expansion joint seal	
RepJoint 3405: Hot Pour Joint Sealant	**Class 3**
RepJoint HCS: Hot applied crack sealer	**Class A&B**

DISCLAIMER:

Refer to the SDS sheet before use. The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of **TuffTex Materials, Inc**. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Published technical data and instructions are subject to change without notice. Contact your local **TuffTex Materials, Inc.** distributor or technical representative for additional technical data and instructions.