



TECHNICAL DATA SHEET

SATCOJOINT 522

GENERAL

SATCOJOINT 522 FLEXIBLE EPOXY SEALANT is a high quality sealant for use in joints where a permanent seal against external elements and corrosive attack is required together with a degree of flexibility not normally associated with Epoxy Compounds. It may be used in expansion joints as well as normal joints of any size. SATCOJOINT 522 is supplied as a two-component material in flow grade for joints.

APPLICATIONS:

SATCOJOINT 522 is especially suited for civil engineering applications such as joint sealants, crack bridging and secondary containment membranes. It is also suitable for other applications requiring toughness such as potting compounds. Some of the proposed applications for formulations containing the specified curing agent may be exposed to low temperatures where embrittlement is a concern. A formulation was tested at 140F to determine the impact on physical properties of this type of exposure. Tensile testing shows that the formulation retains a significant amount of its room temperature flexibility even at 14°F

ADVANTAGES:

- One-to-one mix ratios in dilute formulations
- High tear resistance, tensile strength and elongation
- Good chemical and moisture resistance

APPLICATION:

Prior to application, the two components are mixed to cause a chemical curing reaction, which changes the sealant to a flexible compound. Properly installed, SATCOJOINT 522 has a long life expectancy and is designed to work principally under adverse conditions.

STORAGE LIFE:

At least 24 months from the date of manufacture in sealed containers at ambient temperatures. Store away from excessive heat and humidity in tightly closed containers.

HANDLING PRECAUTIONS:

Refer to Materials Safety Data Sheet for Epoxies

TYPICAL PROPERTIES:

Appearance	Clear liquid
Specific Gravity	Specific gravity approximately 1.65
Colour 1 (Gardner)	2
Viscosity 2 @ 77° F (cP)	1,170
Amine Value 3 (mg KOH/g)	213
Equivalent Wt/(H)	204

HANDLING PROPERTIES:

Formulation mix viscosity, ² Cp	1,080
Gel time, 4 min. (150g mass)	30
Thin film set time 5 hr 75°F/50% RH	70

PHYSICAL PROPERTIES: (@77° F / 10°C)

Shore D hardness ⁶	55
Tensile ⁷ Strength (psi)	1,530
Modulus (psi)	33,800
Elongation (%) (@ ambient)	55
Tear Strength ⁸ (lb/in.)	82
Tg ⁹ (°F) DMA	-31/127
Cured Appearance	Clear

LOW TEMPERATURE PROPERTIES:

Strength (psi) @ 14°F (-10°C)	3,240
Modulus (psi) @ 14°F (-10°C)	8,8740
Elongation (%) @ 14°F (-10°C)	22

NOTE : Samples cured for 7 days at 77°F before testing.

FOOTNOTES REGARDING TESTING STANDARDS

1. ASTM D 1544-80
2. ASTM D 445-88, Brookfield, RVTD, Spindle No 4
3. Perchloric Acid Titration
4. Techne GT-4 Gelation Timer
5. BK Drying Recorder.
6. ASTM D 2240-96
7. ASTM D 638-86.
8. ASTM D 1938
9. Glass Transition Temperature, Tan & maxims of Dynamic Mechanical Analysis, DMA.