

PolyFreeze™ P217-1

Polysulfide Thixotropic Paste Adhesive & Sealant

PolyFreeze™ P217-1 is a one component, Premixed and Frozen polysulfide compound. It has a thixotropic paste consistency that is suitable for use as an adhesive, sealing, or filleting compound. It cures at room temperature or can be accelerated with heat. The PolyFreeze™ P217-1 provides excellent adhesion to aluminum, magnesium, titanium, steel, and many other materials. It Also provides improved thermal conductivity compared to standard polysulfides.

PolyFreeze™ P217-1 is ready to use when thawed and cures to form a flexible, resilient polysulfide rubber that is thermally conductive, and resistant to most fuels including jet fuels contain sulfur compounds. The cured rubber also has excellent resistance to most oils, lubricants, water and to environmental weathering.

BENEFITS & SUGGESTED APPLICATIONS:

- Sold in a Read-to-use syringes and cartridges – just thaw and apply
- Fuel, oil, water, and weathering resistant
- Run and sag resistant
- Flexible, resilient rubber when cured

HANDLING PROPERTIES	<u>VALUE</u>	<u>TEST METHOD</u>
<u>PolyFreeze™ P217-1</u>		
Visual Appearance	Gray Paste	
Consistency	Smooth Paste	
Density, Part A	~2.05 g/cm ³	ASTM E-201
Flash Point	~90°F	ASTM D-92
Pot life, 100 grams mass	2 hours	
Tack Free Time	< 24 hours	
Cure Schedules: At 25°C and 50% relative humidity the minimum cure time will be 48 – 72 hours. Alternately, product can be heat cured for 6 hours at 165°F (74°C).		

PHYSICAL PROPERTIES	<u>VALUE</u>	<u>TEST METHOD</u>
Color	Dark Gray	Visual
Shore D Hardness	50A – 70A	ASTM D-2240
Tensile Strength, psi	>300 psi	ASTM D-638
Tensile Elongation at break	>100%	ASTM D-638
Thermal Conductivity, W/mK	0.83	
Volume Resistivity, ohm-cm	> 1.0 x10 ¹⁰	ASTM D-257
Dielectric Constant, 1KHz	9.7	ASTM D-150
Dissipation Factor, 1KHz	0.08	ASTM D-150

PROCESSING AND APPLICATION INSTRUCTIONS :

PolyFreeze™ P217-1 is supplied in frozen syringes and cartridges. To use thaw at room temperature for 10 – 15 minutes or until flowable. The use of a conductive thawing plate can speed thawing without the risk of reducing the work-life.

Apply to clean, dry surfaces. For best adhesion, abrade the surface with a wire brush, scouring pad, steel wool or coarse sandpaper. After abrasion, clean the surface of any loose material and degrease with solvent or detergent to remove any contaminants.

PACKAGING & STORAGE:

This compound is supplied in pre-mixed and frozen syringes, which have a shelf-life of 90 days from date of shipment when stored at -40C. Premixed and frozen syringes are ready to use once thawed, prevent mixing errors, ensure consistent quality, and reduce waste.

Please contact us for more information about special packaging options.

HANDLING PRECAUTIONS:

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

FIRST AID

In case of contact:

Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

DISCLAIMER:

IMPORTANT: The following supercedes Buyer's documents. **SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended

Specialty Polymers & Services, Inc. (SP&S)

27822 Fremont Court

Valencia, CA 91355

www.spolymers.com

Tel: 661-294-1790

Fax : 661-294-0640

info@spolymers.com