

MATERIAL PROPERTIES

WEARPAK 750

Wearpak 750-Part No. 99.0022 Industrial Silicone

A one-part, moisture-curing RTV (room temperature vulcanizing) which cures to a strong, silicone rubber that maintains long-term durability and flexibility. Wearpak 750 is a 100% Silicone Sealant and Gasketing. It has excellent resistance to weathering including ozone, ultra-violet radiation, freeze-thaw conditions and airborne chemicals.

Fully cured, Wearpak 750 silicone has excellent adhesion to glass, metal, porcelain, ceramic, wood, most plastics and many other non-porous substrates. Wearpak 750 can be applied to surface temperatures from -18°C to $+50^{\circ}\text{C}$ (0° to $+120^{\circ}\text{F}$) and after curing, withstands constant operating temperatures from -50° to $+205^{\circ}\text{C}$ (-58°F to 400°F).



Typical Uses:

Is an excellent sealant and/or adhesive for many industrial applications where a long-term, permanently flexible bond or seal is required. Such applications include:

- Industrial ceramic tile
- Formed-in-place gaskets for axle housings, junction box covers, etc.
- Adhering name plates, letters, signs
- Sealing truck trailers, cabs and cabins
- Skylights
- Adhering appliance trim and sealing appliance parts
- Sealing joints in ductwork
- Sheet metal
- Woods and plastics

Painting:

Wearpak 750 silicone shouldn't be applied to surfaces which will be painted. Painting over sealant is not recommended because the paint film does not stretch with the extension of the sealant.

Packaging:

(10.2 fl. oz) Chalking Cartridges

Colors:

Standard color is white.

Storage:

When stored in original unopened container at or below 32°C (90°F) has a shelf life of 12 months from date of shipment.

Directions:

Wearpak 750 Industrial Silicone Sealant is ready to use and requires no mixing or additives. The cure mechanism begins as soon as the sealant comes in contact with the air. At conditions of 25°C (77°F) and 50% relative humidity, the sealant will "skin" in 10 minutes and fully cure in 24 hours (1/8" bead) and reaches its maximum adhesion in 7 days.

Higher humidity accelerates cure.

Surface Preparation:

All surfaces should be clean and dry. It is recommended that bonding surfaces be solvent wiped with naphthas, ketones or chlorinated solvents. Specific solvents would include xylol, toluol, and mineral spirits. In case of plastics, determine suitability of solvent prior to use. Allow surface to dry thoroughly before applying sealant. Do not solvent wipe with alcohols or oil-containing solvents such as Varsol.

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TYPICAL PHYSICAL PROPERTIES

<u>Characteristic</u>	<u>Test Method</u>	<u>Results</u>
Shore A Hardness	ASTM D2240	28±2
Tensile @ Break	ASTM D412	420±25%
Elongation @ Break	ASTM D412	400±25%
Modulus @ 100% Elongation	ASTM D412	70±10 psi
Tear Strength	ASTM 624 (Die B)	45±10 ppi
Adhesion Strength (Peel)	TT-S-001543, 3.5.9	
Glass		24±2 ppi
Aluminum (Primed)		24±2 ppi
Sag or Slump	TT-S-001543, 3.5.2	NIL
Shrinkage (weight loss)	TT-S-001543, 3.5.5	<5%
Extrusion Rate	1/8" orifice @ 90 psi	130±5 gm/min
Service Temperature	—————	-50° C to 200° C -58° F to +392° F
Tack Free Time	TT-S-001543, 3.5.6	5-10 Minutes
Time to Full Cure (1/8" Bead)	—————	24 Hours
Joint Movement Capability	4:1 Safety Factor	±25%
Chemical Resistance	List Available	Excellent
Color Retention	—————	Excellent
Weatherability	—————	Excellent
Electrical Properties @ 72° F:		
Dissipation Factor	ASTM D150	50 Hz-0.0010 1 Hz-0.0008 1 MHz-0.0002
Dielectric Constant	ASTM D150	50 Hz-2.7 1 kHz-2.7 1 MHz-2.7
Volume Resistivity, Ω cm	ASTM D257	6 x 10 ¹⁴
Surface Resistivity, Ω	ASTM D257	1 x 10 ¹⁶
Dielectric Strength, KV/mm	ASTM D149	25

Safety Precautions:

Wearpak 750 Industrial Silicone Sealant releases small amounts of acetic acid during cure. Adequate ventilation should be provided with extensive use of this sealant. On direct contact, uncured sealant may irritate eyes. Flush eyes well with water and call a physician. Avoid prolonged contact with skin.

Construction Specifications:

Wearpak 750 Industrial Silicone meets Federal Specifications TT-S-001543A, Class B and TT-S-0230C, Type 2, Class B.

All of the above statements, recommendations, suggestions and data concerning the subject material are based on laboratory and field results, and although we believe the same to be reliable, we expressly do not represent, warrant or guarantee the accuracy, completeness or reliability of same, of the material, or the result to be obtained from the use thereof. Nor do we warrant that any such use, either alone or in combination with other materials, shall be free of the rightful claim of any third party by way of INFRINGEMENT or the like, and Saint-Gobain Ceramic Materials DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



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