

# Work Zone High Temperature Silicone Sealant

# TECHNICAL DATA SHEET

## 1. PRODUCT NAME

Work Zone High Temperature Silicone Sealant

## 2. MANUFACTURER

ICB Products,  
75 Chambers Drive, Unit 9,  
Ajax, Ontario, L1Z 1E1.  
Phone: (905) 619-0115  
FAX: (905) 619-6583

## 3. PRODUCT DESCRIPTION

Work Zone High Temperature Silicone Sealant is a heat resistant, multi purpose single component, RTV silicone rubber sealant designed for use in applications which are exposed to higher temperatures on an intermittent or continuous basis. This silicone is formulated to perform at temperatures ranging from -65°C to 260°C (-85° to 500°F) for continuous operation, and to 316°C (600°F) for intermittent exposure. It can be used for numerous sealing and bonding

applications. It is long lasting, and forms a weatherproof & watertight seal, which remains permanently flexible, and will not shrink, crack, crumble or dry out. The sealant has good resistance to weathering, vibration, moisture, ozone and extreme temperatures. It may be applied in subzero weather without loss of extrusion or physical property characteristics and is effective from -62°C to 204°C. It is easy to apply, finger smoothable, and non-flammable.

**Basic Use:** The high temperature properties of this sealant make it ideally suited for use on chimneys and fireplaces where the temperature does not exceed 500°F on a continuous basis, on engines or other applications as a temporary or permanent gasket material, sealing and encapsulating heating elements in appliances, aerospace gasketing, moving oven belts, industrial ovens, bag filters on smoke stacks, and more. Use it on any application for critical bonding, sealing, potting, encapsulating and protective coatings where parts must perform at high temperatures.

**Composition and Materials:** Work Zone High Temperature Silicone Sealant is a 100% silicone polymer with no organic fillers.

**Colours available:** Red, Black.

**Sizes:** 300 ml cartridges, 18.9 litre pails, and 200 litre drums.

**Grade:** gun grade, nonsagging.

**Limitations:** THIS PRODUCT IS NOT FOR USE AS A FIRE STOP SEALANT. Not recommended for continuous water immersion, or where abrasion and physical abuse are encountered. Do not apply to porous surfaces, such as masonry, or on building materials that bleed oils or solvents, such as certain impregnated woods and certain

partially vulcanized rubber gaskets, tapes or adhesives. Do not use in totally confined spaces, because the sealant needs atmospheric moisture to cure. Do not use in aquariums as the bio agents in the sealant may be toxic in solution. Paint does not adhere well to silicone. Not recommended for use on or near sensitive metals such as copper, brass, zinc, carbon steel, galvanized iron or magnesium; these metals may be corroded, especially in confined cure conditions, due to the acetic acid released during the cure process. Before product application, user should determine suitability of High Temperature Silicone for intended use.

## 4. TECHNICAL DATA

**Weight** - 1.035 Kg/litre (8.62 Lb./gal.)

**Shelf life** - 1+ years

**Skin Time** - 6 minutes @ 25°C & 50% R.H.

**Tack Free Time** - 17 minutes @ 25°C & 50% R.H.

**Cure Time** - 24 hours @ 25°C & 50% R.H.

**Flow/Slump** - Nil

**Extrusion Rate** - 390 g/min (1/8" orifice, 90psi)

**Durometer Hardness** - 26 points, Shore A

**Tensile Strength** - 350 psi

**Elongation** - 603%

**Unprimed Adhesion** - good

**Paintability** - not recommended

**Resistance to dirt pickup** - good

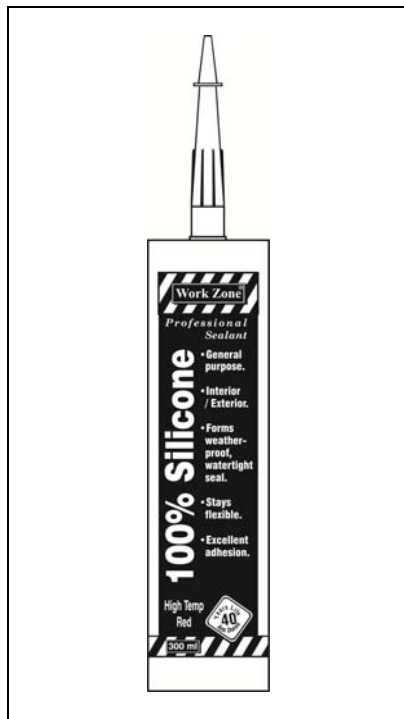
**Flash point** - N/A

**pH** - not determined

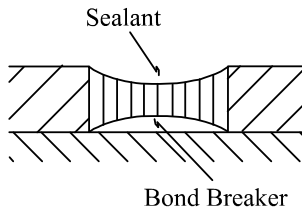
**Odour** - moderate acetic acid (vinegar smell)

**Freeze-thaw stability** - stable

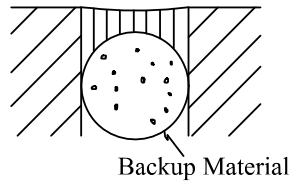
**Storage temperature** - unaffected by temperature, but +5°C to 37°C (40°F to 100°F) is recommended



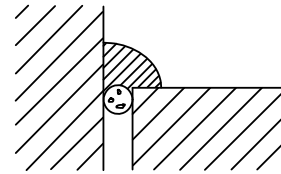
## Recommended Methods of Application



Joint Over 9 mm (3/8")

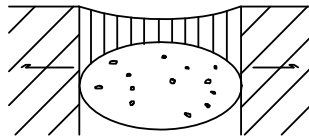


Joint Under 9 mm (3/8")

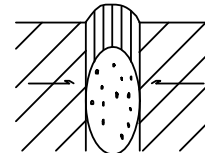


Corner Joint

Properly Applied  
Sealant Under Stress



Maximum Extension



Maximum Compression

## 5. INSTALLATION

**Joints:** Maximum joint size recommended is 13mm (1/2").

**Surface Preparation:** Thoroughly clean and degrease all surfaces. Then rinse all surfaces, except plastic, with acetone. Rubber surfaces should be roughened with sandpaper, then wiped with acetone.

**Joint Backing:** Use only backing materials or bond breakers capable of withstanding expected service temperatures of the application. Consult manufacturer of backing materials or bond breakers to ensure that material is appropriate for use on specific application. Backing material should be used in joints over 9mm (3/8"). Bond breaker should be used in shallower joints to prevent three sided adhesion.

**Weather Considerations:** Do not apply to exterior surfaces if rain is expected within 24 hours.

**Service Time:** Let dry 24 hours before exposing to water.

**Cleanup:** There is no commercial solvent which will dilute uncured silicone, so care must be taken when applying. Wipe excess uncured silicone away carefully with a soft cloth.

## 6. AVAILABILITY AND COST

Marketed throughout Canada and some foreign countries. Work Zone High Temperature Silicone Sealant is sold through building supply,

hardware, paint, and specialty distributors. Costs are available from local Work Zone distributors and representatives, or from company corporate offices.

## 7. WARRANTY

ICB Products warrants that Work Zone High Temperature Silicone Sealant is manufactured according to our published standards, and that it is free from defects. ICB Products will provide replacement for, or refund the purchase price of, that portion of material which proves defective. This constitutes the limit of ICB Products' liability and obligation. The company will not be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user must determine suitability of the product for intended use, and user assumes all risk and liability whatsoever in connection therewith.

## 8. MAINTENANCE

No maintenance is required for properly applied, cured product.

## 9. TECHNICAL SERVICES

Technical assistance is available from ICB Products corporate offices only. Information and testing results are guidelines only and not intended for preparing specifications.

## 10. FILING SYSTEMS

- Technical Data Sheet
- Product catalogues, brochures.
- Additional product information is available upon request.

## 11. COPYRIGHT

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