

OCI BHD

(Formerly Known as Orgavyl Chemical Ind. Bhd.)

TECHNICAL DATA

OCI / ORGAFIX BLACK RTV

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CHARACTERISTICS :

- OCI / Orgafix Black RTV is a non-slumping, one component, acetate-curing rubber paste that cures to a permanently flexible silicone rubber on exposure to atmospheric moisture at room temperature.
- Seals made from OCI / Orgafix Black RTV exhibit an outstanding resistance to weathering, moisture, UV light and extreme temperature between -62 °C and +317 °C. It is also highly resistant to oil, grease and vibration.
- It may be applied to both horizontal and vertical surfaces and may also be used to protect and repair electrical wiring.
- Black RTV adheres to glass, metal, wood, painted surfaces, silicone rubber and some plastic. Since the composition of the substrates can vary greatly, adhesion tests for the specific cases are advisable.

PHYSICAL DATA :

Unvulcanized Rubber

Specific Gravity (DIN 53479)	1.04
Skin Over Time	5 to 20 mins
Tack-Free Time	60 to 180 mins
Extrusion Rate at 2.5 bar (nozzle diameter : 3mm (0.12"))	ca. 45 g/min
Extrusion Rate at 6.3 bar (nozzle diameter : 3mm (0.12"))	ca. 250 g/min

Vulcanized Rubber

measured after curing for 7 days at 23 °C in 50% RH

Tensile strength (DIN 53504 S2)	ca. 1.7 MPa
Elongation at Break (DIN 53504 S2)	ca. 400 %
Hardness Shore A (DIN 53505)	ca. 25
100% Module (DIN 53504 S2)	ca. 0.5 MPa
Shear Strength (aluminium) (DIN 53283)	ca. 0.8 MPa
Shear Strength (Cr/Ni steel) (DIN 53283)	ca. 0.7 MPa
Dielectric Constant (DIN 53453)	ca. 2.9
Dielectric Factor (DIN 53483)	ca. 19 . 10
Volume Resistivity (DIN 53482)	ca. 1. 10 ohm.cm
Dielectric Strength (DIN 53481)	21 kv/mm

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APPLICATION

- OCI / Orgafix Black RTV is a ready to use, solvent free silicone sealant which is primarily designed general purposed sealing and bonding applications.
- The consistency of the uncured material allows a high application rate and makes it good choice not only for dispensing from a caulking gun but also for automatic dispensing.

- The silicone rubber form from Black RTV retains elastomeric properties for long period at temperature up to 317 °C for short periods.
- OCI / Orgafix Black RTV is well suited as Formed-in-Place-Gasket (FIPG) material fo flange sealin example on transmissions, compressors and pumps.
- Black RTV may also be used for :
 - Assembling valve and timing cover, crankcase, radiator, thermostat
 - Bonding gaskets in heating and cooling systems appliances.
 - Sealing connecting joints, flanged pipe joints.
 - Repairing cables.

SURFACE PREPARATION :

- Ensure all surfaces that will be in contact with the sealant must be clean, dry, free of dust ,dirt, rust, oil and other contaminants.
- Nonporous substrates should be clean with solvent and wipe dry immediately with cloth before the solvent evaporates from the surface. Porous surfaces should be roughen with a stiff-bristled brush rubbed down or sandblasted.
- Remove the gap and punch a hole on the tube with the gap's sharp edge. Cut off tip nozzle and screw on nozzle to tube.
- Apply on surface in steady flow by hand pressing.
- If required, smooth and shape sealant with spatula dipped in mild detergent.
- To remove excess uncured sealant with a mineral turpentine soaked cloth. Fully cured excess sealant can be removed by trimming with a sharp knife.
- Content fully cures in 48 hours.

FOR BEST RESULTS :

- To obtain a smooth and neat finish, apply masking tape and remove before sealant cures.
- Paint surfaces completely before applying sealant.

SAFETY PRECAUTION :

- Ensure good ventilation if used indoors.
- Contact of unvulcanised silicone sealant with eyes and mucuous membranes must be avoided as this will cause irritation.
- Prolonged contact with eyes, flush with water and consult physician.
- Keep out of reach of children.

STORAGE :

- Store in dry and cool place below +30 °C.
- Use within 12 months from the date of purchase.

Every endeavor has been made to ensure that the information given herein is true and reliable but it is given only for the guidance of our customers. The company cannot accept any responsibility for loss or damage that may result from the use of the information, due to the possibility of variation of processing or working conditions and of workmanship outside our control. User are advised to confirm suitability of this product by their own tests.