

## Three Bond 1211

### RTV-Silicone Liquid Gasket

The product Three Bond 1211 is a single-component, solventfree and non-acid RTV-Silicone (Room Temperature Vulcanizing) rubber. An oxime neutral cure type, TB1211 can be used for general sealing as well as for electrical insulation. It presents no offensive odour during curing, and will not corrode metal (corrosion of copper based metals may occur when hermetically sealed).

#### 1. Features

- Outstanding mechanical resistance against shear forces
- Excellent adhesion even to slightly polluted surfaces
- Extremely fast curing
- No shrinkage and no generation of corrosive gases
- Excellent dispensing and application
- Long tack free time
- Normal disassembly

#### 2. Properties

Properties	Result	Unit
Reaction type	Oxime	
Colour	White Flowable Paste	
SOD-Viscosity at 25°C	70	Pa·s
Density at 25°C	1.04	g/cm <sup>3</sup>
Touch-proved desiccation *	90	min
Shore hardness	24 A	
Elongation	300	%
Tensile strength	2.5	MPa
Shear strength Al/Al	1.2	MPa
Pressure resistance	> 10	MPa
Effective temperature range	- 60 ~ 200 (250)	°C
Removability	Normal	
Shelf life at 25°C	12	months

\* First skin over time to tack-free time

**3. Chemical Resistance**

Properties	Result	Unit
Engine oil 10W-30 (100°C x 24 h)	+ 0.40	% of Weight
Gear oil (100°C x 24 h)	+ 2.10	% of Weight
Water (95°C x 24 h)	- 0.48	% of Weight
Gasoline unleaded (50°C x 24 h)	- 20.2	% of Weight
LLC coolant 50% (95°C x 24 h)	- 0.35	% of Weight

**4. Electrical Characteristics**

Item	Result	Unit
Volume resistivity	$5.0 \times 10^{12}$	$\Omega \cdot m$
Dielectric constant at 1MHz	2.8	
Dielectric dissipation factor at 1 MHz	0.005	
Breakdown voltage	20	MV/m

**5. Handling**

- Keep the original container tightly closed and store it in a dark, dry, sufficiently ventilated and cool place at a temperature of 5 ~ 25°C.
- The formation of skin and the hardenability of silicone varies depending upon the thickness of the layer, the ambient temperature and the relative air humidity.
- In order to obtain optimum results, remove grease, dirt and other impurities from the fitting surfaces.
- According to the nature of the joints (width, surface roughness, unevennesses) apply an appropriate quantity of silicone uniformly on one of the fitting surfaces and assemble the parts within 30 minutes.
- Silicone once transferred into another container should not be returned to the original container. Excess sealant can be easily wiped off with a cloth.

**6. Packing**

100g tube

Data given here were compiled to the best of our knowledge and are based on experiments and tests of our Company. We cannot guarantee the results obtained through the use of our products, and all products are sold and samples given without any warranty, expressed or implied, of fitness for any particular purpose or otherwise and upon condition that the user shall make his own tests to determine the suitability of the product for his purpose.