# TECHNICAL DATA SHEET



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# **Three Bond 1215** Silicone Liquid Gasket

Three Bond 1215 is a silicone-rubber-based one-component-type grey coloured liquid gasket. It sets automatically at room temperature when it reacts to the moisture in the air. No hardeners, activators or heating required. Three Bond 1215 increases bond strength in the course of hardening. The resultant rubber-like solid resists both heat and cold; maintains stability original status under a wide range of temperature as from  $-60^{\circ}$ C to  $+250^{\circ}$ C.

#### Features

- High resistance to heat, cold, weather and has excellent electric insulation property.
- Little shrinkage occurs as it does not contain solvent.
- Suitable for sealing comparatively large clearances.

# Application

- · Seals various flange surfaces.
- Suitable for sealing wide surfaces
- · Can be used together with solid gasket.

# Characteristics

Before curing

Properties	Units	TB 1215
Appearance		Grey
Viscosity	Pa.s	70.0
Specific Gravity (at 25 <sup>o</sup> C)		1.55
Sag (at 25°C)		non-sag

#### After curing

curing		
Properties	Units	TB 1215
Appearance		Grey
Specific gravity (at 25°C)		1.55
Hardness (JIS)		45
Pulling strength	kg/cm <sup>2</sup>	15
Elongation	%	320
Shear strength (Al plates used, at 25°C)	kg/cm <sup>2</sup>	8
Ignition point		nil
Flash point		nil

#### **Properties**

Pressure resistance and cooling/heating resistance

	Temperature	Pressure resistance kg/cm <sup>2</sup>
Pressure resistance	Room temperature	Above 100
	$80^{0}$ C	Above 100
	150°C	Above 100
Cooling/heating resistance		Above 100

Testing method for pressure resistance: JIS K6820

Surface finishing	HS
Flange used	90 mm OD, 80
mm ID, 15 mm width	
Pressure resistance	180 kgf/cm <sup>2</sup>
Clamping	280 kgf/cm <sup>2</sup>
Clamp bolt used	JIS B1180W 1/2
bolt 2-class x 8	
Flange material	JIS G3101 Type
2 SS41	
Pressure medium	Turbine oil No.
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Pressurising velocity	5 kgf/cm <sup>2</sup> /min

Testing method for cooling/heating resistance:

Lay a bead with specific the flange using the same conditions as in the pressure resistance test. Clamp the flange in the same condition as the pressure resistance test, keep cooling the flange at  $-40^{\circ}$ C for 2 hours, followed by  $+100^{\circ}$ C for 3 hours, and after leaving the flange cooled the flange is measured.

## **Chemical Resistance**

	Mass Change %	Soaking Liquid	Soaking Temperature	Soaking Time
Waterproof	-4.2	Water	90 to 95°C	24 hr.
Oil proof	+3.5	Rubber swelling oil No. 2	95 to 100ºC	24 hr.
Gasoline-p roof	-3.0	JIS K2202 No. 1	45 to 50°C	24 hr.

Testing method: JIS K6820 Fill with specimen the concave section of the glass plate provided by JIS, keep it weathered at room temperature for 24 hours, and after that, dry it at  $100 \pm 5^{\circ}$ C for 3 hours. Apply soak test to the specimen.

## **Handling Precautions**

- 1. Wipe surface clean from moisture, dirt or oil.
- 2. Bond surfaces immediately after application of gasket.
- 3. It is important to ventilate the working area well.
- 4. Keep away from children.
- 5. Combustible. Do not use near fire source.
- 6. Harmful. Do not inhale or ingest. In the event that this product is ingested, immediately consult the physician.
- 7. In the case of eye contact, rinse with water for 15 minutes, then consult physician.
- 8. Wash eyes after removing contact lens.
- 9. Do not use on medical implants.
- 10. Do not use on pipes.
- 11. Please read direction and brochure carefully before use.
- 12. Copper and its alloy will corrode.
- 13. Non-conductive. Do not use near electrical contact points.
- 14. After close tightly the lid, then store.
- 15. Avoid direct sunlight; store at low temperature (10 ~ 25°C) and low humidity.
- 16. For industrial use only.

#### **Packaging**

250g aluminium tube, 333ml and 20kg peal tin

#### Shelf Life

12 months for 250g, 6 months for both 20kg and 333ml unopened and stored at 10  $\sim$  25°C.

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#### Disclaimer

#### For Industrial Use Only

(Do not use for household purposes)

- The data contained in this report are • obtained from experimental results, based on out test method. We cannot assume absolute responsibility for accuracy and safety. Before using this product, use your own judgement to determine whether or not this product meets the requirements of the application and objectives. This includes the burden of responsibility and hazardous danger. The extent of the guarantee provides replacement for products, which are clearly unsatisfactory.
- We assume responsibility for neither injury nor property damages resulting from the misuse of this product.
- We do not assume responsibility without written notice or contract.

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