

## Three Bond TB1102 Liquid Gasket

The product Three Bond 1102 (formerly known as Three Bond #2) is a non-drying liquid gasket on the basis of modified alkyd resin developed and patented by Three Bond from the viewpoints of chemical resistance and easy detachment of joined surfaces. Three Bond 1102 is applied on one of the fitting surfaces and are assembled 2~4 minutes after application. After assembly of the parts it is completely adapted to the surface structure of the fitting faces. All small indentations, such as tool marks and scratches, are filled in as well as any unevenness of the fitting surface. It exhibits exceptional sealing effect, furthermore joined surfaces are easy to separate and clean, resulting in enhanced working efficiency during disassembly.

### 1. Features

- Non-drying type having strong adhesion. By forming a thin layer, it prevents leakage from metal surfaces without adhesion.
- Also effective in preventing leakage from threaded fasteners.
- Apply with a brush, oiler or flow gun.
- Excellent chemical resistance, especially to gasoline.

### 2. Uses

- Various flange joints and threaded parts.
- Particularly suitable for joined surfaces which require repeated separation or threaded joints that require adjustment.

### 3. Properties

Properties	Result	Unit
Main component	Modified alkyd resin	
Colour	Yellow	
Viscosity at 25°C	6,900	mPa·s
Density at 25°C	1.33	g/cm <sup>3</sup>
Residue after heating	79	%
Condition after curing	Non-drying / non-elastic	
Disassembly	Easy	
Effective temperature range	- 40 ~ 150	°C
Shelf life at 25°C	24	months

**4. Performance**

Properties	Result	Unit
<b>Pressure Resistance</b>		
at 25°C	9.3	MPa
at 80°C	7.4	MPa
at 150°C	5.9	MPa
30 cycles (-40°C x 2h / 100°C x 2 h)	7.4	MPa

Test conditions:

- Surface finish: 6.3S
- Surface pressure: 15.7 Mpa
- Clamping bolt: JIS B 1180, M12 bolt, Class 2, 6 pcs.
- Flange material: JIS G 3101, Type 2 SS41
- Hydraulic medium: Turbine oil No. 1
- Applied flange: 90mm OD, 60mm ID, 15mm width
- Tightening: 27.5 N.m
- Rate of pressure increase: 0.5 Mpa per minute

Properties	Result	Unit
<b>Chemical Resistance</b>		
Engine oil (100°C x 24h)	+ 3.4	Weight-%
Gasoline (50°C x 24 h)	+0.2	Weight-%
Water (95°C x 24 h)	+1.0	Weight-%

Test conditions:

- Initial curing: 24 hours + 100°C x 3 hours
- Immersion: 24 hours
- Post drying: 65°C x 24 hours

**5. Instructions**

- Thoroughly remove moisture, grease, dirt and other impurities from the surfaces to be joined.
- Apply as thinly and uniformly as possible.
- Assemble joints 2~4 minutes after application.
- 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.
- Product may settle upon long term storage, stir well until uniform before using.
- Flammable; take precautions in storage and handling (refer to MSDS).
- Ensure adequate ventilation and wear appropriate personal protective clothing and devices (refer to MSDS).

**6. Packing**

200g tubes, 1 kg and 3kg cans, 250kg drum.

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.