

TECHNICAL DATA

ThreeBond 1121

Liquid Gasket

Non-Polluting Liquid Gasket
Non-Solvent Paste-Type. Adheres without drying.

Three bond 1121 is a Non-drying liquid gasket based on modified ester resin. It contains no solvent, therefore it does not deteriorate with age. Since it is non-drying, it allows easy disassembly of joined parts with the resultant working.

Features

1. Three Bond 1121 contains no organic solvent.
2. It is not inflammable and is not classified as a dangerous substance.
3. Three Bond 1121 is virtually odourless.
4. It allows assembled parts to be readily disassembled.
5. It can be used with solid gaskets since it does not erode or cause rubber and plastics to deteriorate.
6. Three Bond 1121 has excellent resistance to gasoline.
7. It can be readily diluted with a special solvent when required.

Applications

Three Bond 1121 Liquid Gasket is suitable for use on the all-mating surfaces, three parts, and especially on surfaces, which are repeatedly assembled and disassembled. In addition, it is well suited for use on joints with large surfaces.

Use on the following is especially recommended: Shipboard hatch-covers, joints flanges, marine engine cylinder side covers, side covers, valve covers, drain cocks, and other similar applications.

Directions to Use

1. Wipe the surface to remove moisture, oil and other contaminants.
2. Apply as thinly and evenly as possible.
3. Assemble parts immediately after application.

All recommendations and statements are based on our research and we believe them to be reliable. We cannot guarantee the results obtained through the use of our products. All products are sold and samples are given without warranty, expressed or implied, of fitness for any particular purpose or otherwise. The user shall make his own tests to determine the suitability of the product for his purpose. No agency or representative or employee of this company is authorised to change this provision.

Properties

Appearance	Grey
Non-volatile matter	100%
Viscosity (at 25 °C)	300 Pa.s
Specific gravity (at 25 °C)	1.45

Chemical Test

Tests were made in accordance to specifications of JIS-K-6820. A glass panel with a recess filled with a coat of fluid sealant was air-dried for 24 hours, then baked at 100 °C±5°C for 3 hours. Then the test piece was placed in a desiccator and allowed to cool to room temperature. Thereafter, the test piece was weighed and the following tests were applied.

Water Resistance

The test piece was immersed in 90-95 °C water using distillation device with a recycle tower attached. It was then washed with methyl alcohol and dried at 65 ±5 °C for 24 hours, and thereafter cooled to room temperature. The test piece was checked for change in weight.

Oil Resistance

The test piece was immersed in 95-100 °C rubber lubricant No. 2 for 24 hours and subjected to the same testing procedures as described in Section (1).

Gasoline Resistance

The test piece was immersed in 45-50 °C automobile gasoline No. 1 for 24 hours, and then the test processed in the same manner as outlined above.

Test Results

	Change in weight (%)
Water Resistance	- 5.5
Oil resistance	+1.7
Gasoline Resistance	- 4.4

All recommendations and statements are based on our research and we believe them to be reliable. We cannot guarantee the results obtained through the use of our products. All products are sold and samples are given without warranty, expressed or implied, of fitness for any particular purpose or otherwise. The user shall make his own tests to determine the suitability of the product for his purpose. No agency or representative or employee of this company is authorised to change this provision.

Pressure Resistance

The test was made in accordance with the following parameters.

Flange used	90 mm outside diameter, 60 mm inside diameter, 15mm width.
Clamping bolts	W1/2 inch 6
Clamping force	280 kg/cm surface pressure 160 kg/cm ² .
Surface finish	Turbine oil No. 1 (JIS-K-2213)
Compression speed	5 kg/cm ² /min.
Temperature	Room temperature, 80 °C, 150 °C.

Working pressure after a cool-heat cycle

The same apparatus was employed as those used in Pressure Resistance Test. The specimen was applied onto the joint surfaces, which were tightened using the same torque as in the Pressure Resistance Test. The flanges were cooled to -40 ±5°C for 2 hours and baked at 100 ±5°C for 3 hours. Thereafter they were cooled down to room temperature.

Test Results

	Pressure Resistance (kg/cm ²)
At room temperature	90
80 °C	70
150 °C	65
Working pressure after cool-heat cycle	70

Handling Precautions

1. This product is inflammable; please take precautions in storage and handling (refer to MSDS).
2. If using a large amount of this product or using for a long time, it is compulsory to ventilate the area well. If necessary, use mask, non-permeable gloves, protective glasses, ventilate well with local exhaust equipment.
3. Do not inhale or ingest. In the event that this product is ingested, immediately consult physician.
4. Product may settle upon storage, stir well until uniform before using.
5. After use, close the lid tightly, then store. Do not return unused portion, if transferred, to original container.
6. Before use, clean the bonding area to remove grease or dust.
7. Apply with brush, oiler or Three Bond Flow Gun.
8. Tighten joints 2-4 minutes after application.
9. Keep away from children.
10. For industrial use only.

All recommendations and statements are based on our research and we believe them to be reliable. We cannot guarantee the results obtained through the use of our products. All products are sold and samples are given without warranty, expressed or implied, of fitness for any particular purpose or otherwise. The user shall make his own tests to determine the suitability of the product for his purpose. No agency or representative or employee of this company is authorised to change this provision.

Shelf Life

24 months when stored at 5 ~ 35°C, unopened.

Packaging

Available in packing size of 20g (tube), 200g (tube), 1 kg (can) and 20kg (pail)

Disclaimer

For Industrial Use Only

(Do not use for household purposes)

- The data contained in this report are obtained from experimental results, based on our test methods. 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.

All recommendations and statements are based on our research and we believe them to be reliable. We cannot guarantee the results obtained through the use of our products. All products are sold and samples are given without warranty, expressed or implied, of fitness for any particular purpose or otherwise. The user shall make his own tests to determine the suitability of the product for his purpose. No agency or representative or employee of this company is authorised to change this provision.