

BLAZER™ S2, a PERFLUORO ELASTOMER, exhibits stable sealing performance when exposed to high-temperature steam or a nucleophilic agent. The new cross-linking agent (patent applied for) and our unique blending technology are used for this, resulting in greatly improved steam resistance, RGD (rapid gas decompression) resistance, and toughness at high-temperature.

Features

Rough value of heat resistance: 320°C

Standard hardness (Duro A): 80

Offers the broadest chemical compatibility, e.g., better resistance amines, esters, ethers, ketones, acids, bases, hydrocarbons, chlorine-based solvents, hot water and steam.

Provides excellent RGD resistance so parts maintain sealing properties and equipment life is extended.

Excellent toughness at high temperatures.





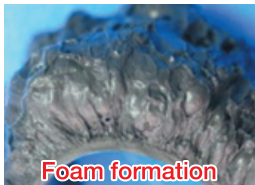
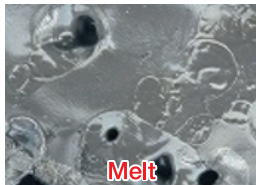


TOMBO™ No.2675-S2

Applications

Can be used as a seal in valves, pumps, turbo machinery, painting machines, centrifuges, agitators, analyzers, reaction furnaces, and the like.

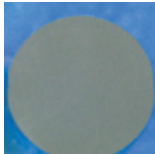
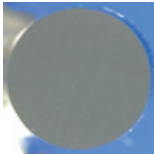
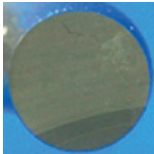
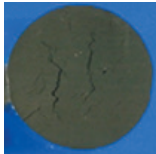
Steam resistance test results

Testpiece			BRAZER™ S2	BRAZER™ S	Competitor's
320°C	72hours	Before			
		After		 Foam formation	 Melt

In an environment of high-temperature steam, competitor's undergoes hydrolysis and melt.
In contrast, BLAZER™ S2 does not undergo hydrolysis.

Rapid pressure reduction characteristics test results

When the pressure of this elastomer in a high pressure environment is reduced rapidly, the gas which had permeated the elastomer due to the high pressure swells as a result of the rapid pressure reduction, which may cause blistering of the elastomer. As a result of being subjected to a rapid pressure reduction, the BLAZER™ S2 is found to have 1 or 2 damage points, and compared to other companies' perfluoro-elastomer, it is suitable for use in an environment in which the pressure is rapidly reduced.

Testpiece	BRAZER™ S2	BRAZER™ S	Competitor's	BRAZER™ NEXT
Cross-section O-rings after test				
Damage rating	1 or 2	1 or 2	1 or 2	3

Evaluation criteria of the number of damage points	
Number of points	Condition inside the sample after the test
1	No damage
2	No more than 1 crack or blister on the cut face
3	Cracks or blister on no more than 50% of the cut face
4	Cracks or blister on more than 50% of the cut face

● Test conditions

Heat the pressure vessel, then pressure-feed CO₂, and leave standing.

Temperature: 100°C

Pressure: 15 MPa

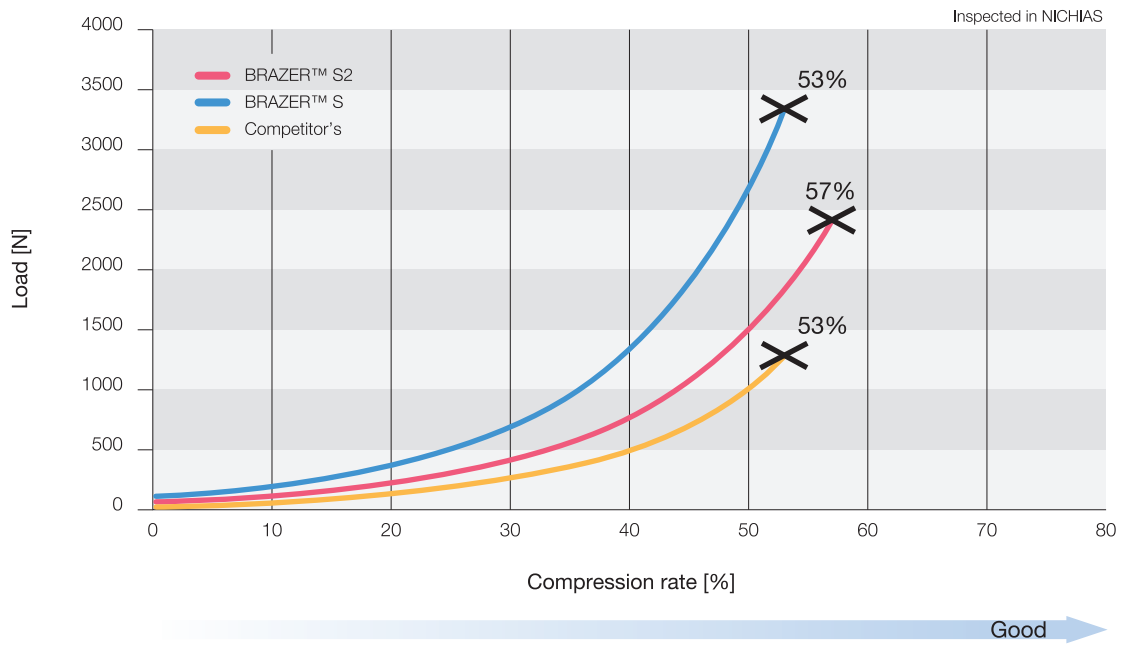
Fluid: Supercritical CO₂

Holding period: 24 hrs

Pressure reduction rate: 7 MPa/min

Testpiece: Thickness ϕ 3.53 mm × 30 mm Strip

Evaluation results of resistance against compression force (at 300°C in an air)



● Test conditions

Testpiece: Thickness ϕ 3.53 mm × 50 mm Strip

Atmosphere: Air

Compression rate: 0.1 mm / min

Temperature: 300 °C

BLAZER™ S2 has excellent resistance against compression force at 300°C