

Cartell Chemical Co., Ltd., established in 1994, is a world-class manufacturer of industrial adhesives, sealants, and specialty chemical products.

Its flagship brand MXBON® delivers high-performance, cost-effective, and reliable solutions for design, manufacturing, assembly, and maintenance across the industrial sector.

MXBON® products are widely used in a broad range of industries, including traditional manufacturing, electronics, electrical engineering, medical equipment, railway transportation, shipbuilding, sports equipment, hand tools, pneumatic tools, 3C electronic products, and the automotive industry.

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# Adhesives Expert

# MXBON®



## RETAINING COMPOUND



### 12603 Oil tolerant, press-fit

Achieves initial curing within 10 minutes.  
Optimized for tight press-fit assemblies where high strength and oil tolerance are essential.  
Recommended for securing bushings, gears, sleeves, and structural metal parts subjected to heavy loads or vibrations.

### 12620 High strength, heat resistance, non-dripping, high lubricity

Achieves initial curing within 30 minutes.  
Withstands temperatures up to 230°C, and its high lubricity facilitates smooth assembly.  
Ideal for bonding high-speed shafts, pulleys, and bearings in high-temperature environments or enclosed housings.

### 12638 High strength, fast curing

Achieves initial curing within 5 minutes.  
High impact resistance and excellent chemical resistance.  
Designed for applications with loose tolerances or minor surface irregularities, such as industrial machinery and high-performance motors.

### 12639 High strength, large gap filling, suitable for passive metal

Fast-curing formulation suitable for both active and passive metal surfaces.  
Effective on worn or slightly oversized parts such as pulleys, gears, or collars.

### 12648 High strength, passive metal applicable

Achieves reliable fixture strength within 5 minutes.  
Suitable for assemblies requiring high torque retention with minimal surface preparation.  
Works reliably on stainless steel and precision cylindrical fittings with narrow tolerances.

### 12680 General purpose

Achieves reliable fixture strength within 10 minutes.  
Offers a balance of medium viscosity and excellent vibration resistance for slip-fit joints.  
Ideal for retrofit repairs or preventive maintenance of pulleys, gears, and shaft-mounted parts.



#### TIPS of USING



- 1) Clean Surfaces:** MXBON Retaining Compound performs best on clean, oil-free surfaces. Use MXBON cleaner and activator for optimal surface preparation and accelerated curing.
- 2) Passive Substrates:** For less reactive metals like stainless steel, an activator is recommended to ensure complete curing.
- 3) Plastic Components:** Do not use MXBON Retaining Compound on plastic parts unless specifically tested, as many thermoplastics can crack when exposed to liquid anaerobic adhesives.

MXBON Retaining Compound is primarily used for the assembly of various metal cylindrical components, such as bearings, bushings, pins, keyways, racks, hubs, and pulleys. It supersedes traditional, time-consuming, and high-cost methods like press-fitting, pin insertion, and keyways, transforming them into simpler and more efficient light press-fit or slip-fit methods. MXBON Retaining Compound, through its 100% surface contact, achieves high torsional and shear strength. It ensures that components do not loosen due to rotation or vibration and provides substantial load transfer capacity. It streamlines the assembly operations of cylindrical components without threads, diminishes the precision requirements for component machining, and can replace parts such as circlips, retaining plates, and clamps. Simultaneously, it minimizes the stress caused by press-fitting assembly, preventing component damage, and thereby increasing component lifespan, substantially reducing processing costs. The assembled product can withstand harsh environmental conditions, resist the erosion of lubricating oil, machine oil, gasoline, weak acids, weak bases, and most chemical substances, while providing sealing and rust prevention capabilities.

#### Technical Information

Item No.	Appearance	Fluorescence	Viscosity mPa.s (cP)	Gap filling mm	Shear Strength N/mm <sup>2</sup> (Psi)	Working Temp. °C	Fixture Time	Fully Cured	NSF
12603	Green	◆	100–150	0.10	≥ 23 (≥ 3,263)	-54°C–150°C	10min	24hrs	◆
12620	Green	◆	5,000–12,000 Thixotropic	0.40	≥ 24 (≥ 3,480)	-54°C–230°C	30min	24hrs	◆
12638	Green	◆	2,000–3,000	0.25	≥ 25 (≥ 3,625)	-54°C–180°C	5min	24hrs	◆
12639	Green	◆	2,000–3,000	0.50	≥ 25 (≥ 3,625)	-54°C–180°C	5min	24hrs	◆
12648	Green	◆	400–600	0.15	≥ 25 (≥ 3,625)	-54°C–180°C	5min	24hrs	◆
12680	Green	◆	750–1,750	0.25	≥ 19 (≥ 2,799)	-54°C–180°C	10min	24hrs	◆

\*The content and data within this list are based on the respective Technical Data Sheets (TDS) of each product. Before deciding on the adhesive to use, it is recommended to conduct actual tests to ensure product performance.

#### Activator Technical Information

Item No.	Usage	Property	Main Component	On-Part Life	Dry Time	NSF
017090	For anaerobic adhesives, anaerobic structural adhesives	Formulated for compatibility with MXBON anaerobic adhesives and sealants. Low odor, non-flammable, and non-toxic formulation. Significantly reduces curing time.	Polyethylene Glycol Dimethacrylate	1 hour	Will not dry	
017649	For anaerobic adhesives, anaerobic structural adhesives	Anaerobic Adhesive Activator is suitable for all anaerobic adhesives and shortening the fixture time. We can apply it first or spray it later. Typical applications: inactive or plating metal surfaces.	Acetone Heptane	14 days	≤ 100 sec	◆