

LOCTITE®

UNIVERSAL BONDS CATALOG

NORTH AMERICAN
PRODUCT CATALOG



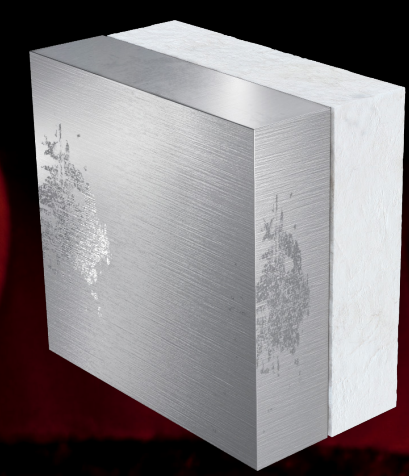
UNIVERSAL MEANS WITHOUT LIMITS.

Epoxies and acrylics all have limitations. LOCTITE® Universal Bonders shatter those limits. Engineered for the strongest, most durable bonds and fast fixture on virtually any material, they're the only structural bonder you'll ever need. There's no limit to what they can do.

LOCTITE
HY 4070™
IMPERMEABLE FASTENER STRUCTURAL BONDING

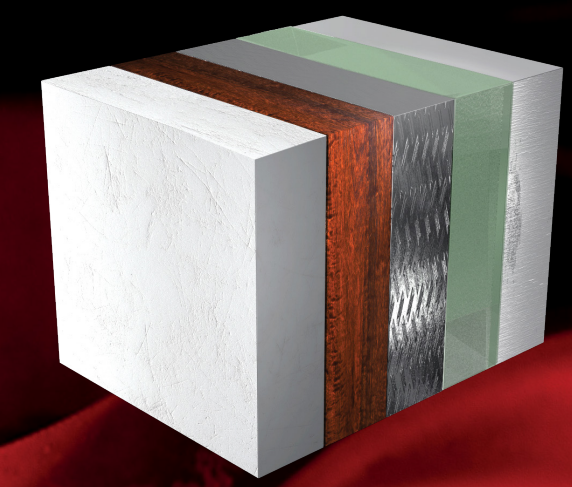
HY 4070™ and HY 4090™
**Almost nothing they
can't do.**

UNIVERSAL BONDERS



PROBLEM

Without Universal Bonders:
Multiple material assemblies
require additional primers,
more cure time and are
susceptible to vibration,
temperature changes and
humidity.



SOLUTION

With Universal Bonders:
Strong, durable, fast
bonding of multiple
materials.

The most versatile adhesive. In your toolbox.

Faster fixture. Faster repairs.



LOCTITE® HY 4070™ is a 2-part, transparent, colorless to pale yellow cyanoacrylate/acrylic hybrid gel adhesive that provides a fast fixture at room temperature in bond gaps up to 0.2 in. (5 mm). It suits various substrates including most plastics, rubbers and metals. It is used where complete cure of excess adhesive as well as temperature and moisture resistance is required.



Fixture Time: <60 seconds

Strength: 3,625 psi

Substrate: Plastic, Rubber, Metal, Wood

Product	Item Number	Pack Size	Features	Color	Gap Fill	Viscosity [cP]	Mix Ratio	Temperature Range	Fixture Time	Lap Shear Strength, GBMS
HY 4070™	2264448	11 gm	Ultra-fast, multi-substrate bonder	Transparent to Pale Yellow	0.2 in. (5 mm)	Gel	10:1	-40°F to 212°F (-40°C to 100°C)	< 60 (aluminum, 0.05 mm gap)	3625 psi (25 N/mm²)
	2494415	45 gm								

Dispenser

UNIVERSAL BONDERS

Universal Dual Cartridge

Manual Dispenser

45 gm

267452

Nozzles

UNIVERSAL BONDERS

11 gm

1434516

45 gm

1509102





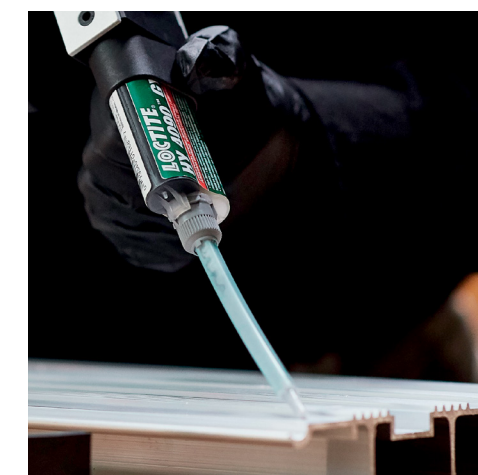
Fast curing adhesives. For industrial design solutions.

Create strong and reliable bonds with HY 4090™



LOCTITE® HY 4090™ is an off-white to light yellow gel with high viscosity. It opens up new application areas in structural bonding by combining instant adhesive properties with those of epoxies to give more striking benefits:

- Fixture time of 90-180 seconds and suitable for gaps up to 5 mm
- Resistant to vibration, shock loads and impacts



Fixture Time: <180 seconds

Strength: 2,420 psi

Substrate: Plastic, Rubber, Metal, Wood

Product	Item Number	Pack Size	Features	Color	Gap Fill	Viscosity [cP]	Mix Ratio	Temperature Range	Fixture Time	Lap Shear Strength, GBMS
HY 4090™	2123350	50 gm	Multi-material bonder; fast strength build; good environmental resistance	Multi-material bonder; fast strength build; good environmental resistance	0.08 in. (2 mm)	Gel	1:1	-40°F to 284°F (-40°C to 140°C)	< 180	2420 psi (17 N/mm²)
	2060035	400 gm								
HY 4070™GY	2205827	50 gm	Multi-material bonder; fast strength build; good environmental resistance	Grey	0.08 in. (2 mm)	Gel	1:1	-40°F to 284°F (-40°C to 140°C)	< 180	2420 psi (17 N/mm²)

Dispensers

UNIVERSAL BONDRERS

Dual Cartridge Applicator 50 ml
Manual: 720228
Pneumatic: 476898

Dual Cartridge Applicator 400 ml
Pneumatic: 218311

Nozzles

UNIVERSAL BONDRERS

50 ml
1573153

400 ml
1573135



Fast, Durable Bonding of High Volume PA and ABS Components



“LOCTITE had the perfect adhesive solution to help bring our new product to life.”

A designer and manufacturer of battery packs for electronic devices was designing a new product and searching for an adhesive to bond PA and ABS plastics. The adhesive needed to allow for projected production line volumes and be resistant to vibration, temperature and humidity variances. **LOCTITE® HY 4090™**, a fast curing universal bonder that provides strong bonds without primers or other surface treatments, was a perfect candidate. A LOCTITE® Engineering Solutions Expert showed them how to clean

battery pack parts with LOCTITE® SF 7063™ to remove molding compounds that may inhibit final bond strengths, then dispense **LOCTITE® HY 4090™** from the dual cartridge packaging using the LOCTITE® manual applicator equipped with a mixer nozzle. The hybrid adhesive fixtured in just 3 minutes, minimizing any potential blooming from exposed fillets of the cyanoacrylate based product, and provided a bond to PA and ABS plastics that withstood vibration, temperature and humidity variances.

BENEFITS

LOCTITE® HY 4090™ Universal Bonder:

- Generates strong, multi-material bonds without requiring additional surface primers
- Provides a fast fixture rate of 3 minutes that will not impede the proposed line speed
- Results in assemblies that resist vibration, temperature changes and attack by high humidity

LOCTITE®