

3M™ Polyurethane and Hybrid  
Adhesives & Sealants



# The POWER Line

Bonding Glazing Water Proofing  
Dampening Sealing Filling Insulating  
Strengthening

**3M**

# A powerful line of high performance

## polyurethane and hybrid adhesives & sealants

Now, advanced chemistries from 3M, a world leader in adhesive technology, give you powerful alternatives for bonding, filling, sealing, waterproofing and more.

3M™ Polyurethane and Hybrid Adhesives & Sealants are advanced, one-part formulations that require no mixing or special application tools. 3M's POWER Line products cure with atmospheric moisture to form durable, resilient, long-lasting bonds ideal for:

- Truck, trailer, bus and other vehicle panel mounting
- Marine OEM deck-to-hull joining, through-hull fastening, deck fitting and more
- Roof flashings, through-wall pipe and cable sealing and other construction applications
- Concrete sealing and expansion joint filling
- Marine and specialty vehicle window bonding and glazing
- Many other applications in a wide range of industries

### Easy to use. Tough to beat.

Some industries still rely on rivets, screws, bolts and welds for the majority of their fastening. But mechanical fasteners are often limited to heavier materials of similar construction, and create stress points and areas where corrosion can form. In addition, low-tech adhesives simply aren't designed for tough industrial applications. 3M's POWER Line adhesives and sealants can actually out-perform mechanical fasteners—with none of the drawbacks you may have experienced with other adhesives.

### *Introducing* The **POWER** Line



#### 3M™ 525 Polyurethane Construction Sealant

- Excellent for concrete sealing
- Extremely pliable and flexible
- 90+ minute skin time

#### 3M™ 535 Polyurethane Construction Sealant

- Excellent sealer for concrete and flashing
- Paintable
- 90-minute skin time

#### 3M™ 540 Polyurethane Sealant

- Excellent cosmetic sealer
- Paintable
- Smoke and flame rated
- 90-minute skin time

#### 3M™ 550 Polyurethane Adhesive Sealant Fast Cure

- Multi-purpose adhesive sealant
- Paintable
- Above/below waterline use
- 60-minute skin time

#### 3M™ 551 Polyurethane Adhesive Sealant

- Multi-purpose adhesive sealant
- Above/below waterline use
- Medium strength
- 2-3 hour skin time

#### 3M™ 560 Polyurethane Adhesive Sealant

- Panel-bonding adhesive
- Very high strength
- Smoke and flame rated
- 50-minute skin time

## A Superior, Flexible Bond

Mechanical Fasteners	Low-tech and General Adhesives	3M™ Polyurethane and Hybrid Adhesives & Sealants
May require significant training and expertise (welds) or require multiple steps (drilling, fastening, finishing, sealing, etc.).	Often require mixing, special application techniques or equipment.	<b>Easy to apply. Help increase productivity, simplify operations and cut costs.</b>
Stress failure can be the ultimate result for many riveted joints. Welds are vulnerable to uneven heating and may become brittle.	Bonds can become brittle and joints rigid.	<b>Stay flexible after cure. Result in durable, long-lasting bonds AND help joints or bonded areas resist vibration fatigue.</b>
Screws and rivets mean surface holes, gaps and the chance for distortion, splitting or crazing at the fastener site, as well as opportunities for rust and corrosion.	Some low-tech adhesives expand or drip out from the joints or bonded areas, yet often leave gaps. Cleanup and refinishing can be a costly headache and, worse, joints can pop apart.	<b>Offer "invisible" fastening that fills gaps and expands and contracts with heat and cold. Surfaces stay smooth and clean. Your product looks great with less surface refinishing.</b>
Many mechanically fastened joints and bonds also require sealing against dirt, dust, water, etc., which adds production time and material costs.	Not all low-tech adhesives sold for industrial use can stand up to harsh outdoor environments or the fuels and chemicals of many industrial applications.	<b>Bond AND seal in one step.</b>



## The POWER Line design advantage

3M™ Polyurethane and Hybrid Adhesives & Sealants offer more versatile fastening and sealing solutions, greatly expanding your product or project design alternatives. Now you can:

- Match the bond strength to the job at hand
- Use thinner, lighter, even dissimilar materials as design and cost-saving solutions
- Produce bond lines that can bend and flex
- Assemble large, lower tolerance parts as well as bond complex parts to close tolerances
- Reduce vibration and noise
- Seal out corrosive elements; eliminate or minimize leaks



### 3M™ 5010 Polyurethane Multi-Purpose Adhesive

- Minor gap filling
- Versatile, fast-grabbing, high strength adhesive
- Excellent water resistance
- 3-minute skin time

### 3M™ 5200 Polyurethane Adhesive Sealant

- Very high strength
- Watertight bonds
- Above/below waterline use
- 48-hour skin time

### 3M™ 590 OEM Polyurethane Glass Adhesive Sealant

- Structural glass bonding
- Crash tested (FMVSS 212)
- 3-hour drive-away time
- 30-minute skin time

### 3M™ 740 Hybrid Sealant

- Excellent cosmetic sealant
- Excellent UV resistance
- Low VOC
- 50-minute skin time

### 3M™ 760 Hybrid Adhesive Sealant

- Excellent adhesion
- Paintable when wet
- Above/below waterline use
- Low VOC
- 30-minute skin time

### 3M™ 4000UV Hybrid Adhesive Sealant Fast Cure

- Very high strength
- Excellent UV resistance for glazing applications
- Above/below waterline use
- Low VOC
- 20-minute skin time

## 3M's POWER Line Difference:

# Innovative products ...

As a world leader in adhesive technologies and a pioneer of polyurethane chemistry in the 1960s, 3M is uniquely positioned to offer a comprehensive line of adhesives and sealants. These products are specifically designed for industrial markets and offer significant advantages over currently available products, including:

- Higher quality formulations that resist yellowing, cracking, chalking and UV degradation
- High performance hybrid products with superior environmental characteristics and other unique attributes
- Many of our products are certified to industry specifications (flame & smoke, marine, etc.)
- Extensive packaging innovations that lengthen shelf life, improve economy, simplify dispensing and reduce environmental impact

### Advanced 3M hybrid technologies

3M's hybrid polyurethanes are the most recent development in elastomeric adhesive sealants. These exciting products offer all the advantages of 3M's polyurethane adhesives and sealants, PLUS:

- Faster skin time
- No isocyanates or solvents, for a better environmental profile
- Improved UV resistance—less “chalking” and staining over time
- Broader adhesion to a variety of substrates, with less need for primers
- No bubbling—even under high temperature or humidity
- Greater short-term heat resistance
- Excellent color stability
- Paintable, even when wet

## Applications

### For 3M hybrid adhesives and sealants

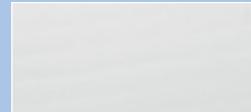
- cosmetic skinning on boats, buses, trailers
- any application where Environmental Health and Safety (EHS) is critical
- bonding high-performance applications, such as marine windshields
- waterproofing joints without primers in concrete, glass, marble, granite and brick
- bonding and waterproofing modular building panels or bathroom units
- structural bonding in industrial bodywork
- domestic appliances and electrical equipment

### For 3M polyurethane adhesives and sealants

- |  |                        |
|--|------------------------|
| • concrete expansion gaps                        | • parquet floors       |
| • waterproofing joints and seals without primers | • household appliances |
| • windshield applications                        | • electrical equipment |
| • panel bonding                                  | • industrial bodywork  |
| • gasket sealing                                 | • outdoor woodwork     |
|  | • shipbuilding         |

## ... Superior results

### 3M's POWER Line Products



Advanced chemistries resist cracking, yellowing, chalking and UV degradation



3M's proprietary formulations can eliminate foaming



Unique 3M formulas offer consistency that maximizes performance



3M hybrids and polyurethanes resist bleeding and staining

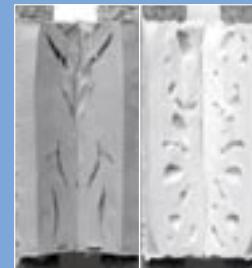
### Competitive Products



Lower grade adhesive/sealants can crack, yellow and turn chalky over time



Competitive adhesives can foam and create messy expansion problems



Competitive sealant formulations can compromise performance and cause bubbling or cracking



Competitive products can bleed into porous substrates, staining the finish

# Innovative packaging



Sturdy aluminum cartridges with pull-tab end caps resist denting and keep adhesive/sealant from curing



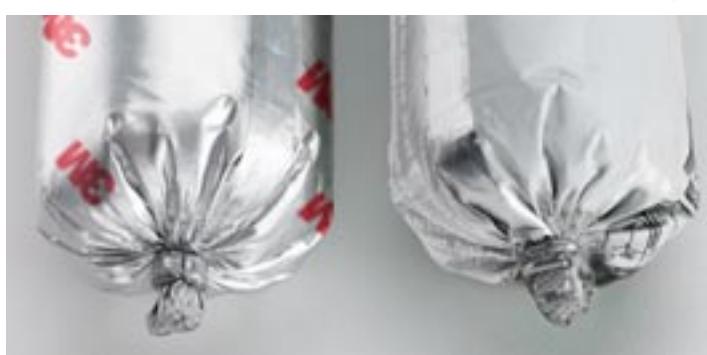
Competitive cartridges are often easier to dent and deform, increasing waste, reload time and exposure to ambient moisture



Interchangeable, removable tips allow rapid cleaning and easy reuse of open packages, reducing waste



Clipped-on tip helps prevent damage during shipping, reducing product waste



Crimped ends on 3M sausage packs (versus wire clips on other brands) help extend shelf life by sealing out moisture, which can cause premature curing and wasted product



400ml and 600ml sausage packs cost less per ounce and boost productivity by reducing cartridge reload time

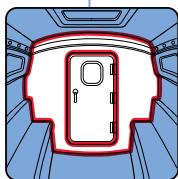
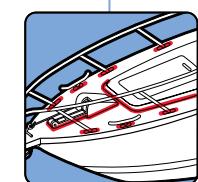
## A formulation for virtually every application

No two industrial bonding or sealing applications are exactly the same. That's why 3M has a complete range of options from which to choose, including products with slow to rapid cure rates and skin times; a wide variety of packaging choices and sizes, from traditional cartridges and economical sausage packs to drums; and several color choices. A 3M adhesive/sealant technical specialist can help you select the right products for your specific applications.

# Marine Applications

## Exceptional performance in the harshest environments

Extreme flexibility and toughness are key for both marine repair and OEM construction. Constant pounding by waves, salt spray, intense sunlight and potential exposure to fuels and oils all require exceptionally strong, flexible bonds and seals. 3M set the performance standards 40 years ago with industry leading 3M™ 5200 Polyurethane Adhesive & Sealant. Now 3M's POWER Line offers marine OEM and repair professionals a complete selection of innovative bonding and sealing formulations. Count on 3M™ Polyurethane and Hybrid Adhesives & Sealants to help you withstand whatever nature throws at you.



### POWER Line Products for Marine—Application Summary

	540	550	4200	551	560	590	5200	5200FC	740	760	4000UV
Sealing	xx	xx	xx	xx	x	x	x	x	xx	x	x
Bonding		x	x	x	x	xx	xx	xx		xx	xx
Removable	y	y	y	y	n	n	n	n	y	y	y
Above Water	y	y	y	y	y	y	y	y	y	y	y
Below Water	n	y	y	y	y	y	y	y	n	y	y
Chemical Base	PU	PU	PU	PU	PU	PU	PU	PU	Hybrid	Hybrid	Hybrid
Ratings, Certifications <sup>‡</sup>	1,2,3,4,6	1,7	1,7		2,3,4,6	5			7	7	
Skin Time	90 min	60 min	60 min	2-3 hr	50 min	30 min	48 hr	1-2 hr	50 min	30 min	20 min
Cure Time	24 hr	24 hr	24-48 hr	24-48 hr	24 hr	9-24 hr	1-14 days	24-48 hr	24 hr	24 hr	24-48 hr

#### APPLICATIONS

Deck-to-Hull Bonding		xx	x	xx	x		xx	xx			x
Keel Bonding							xx	xx			
General Interior Sealing	x	x	x								
Glass Window Bonding						xx*					
Fritted Glass Window Bonding						xx*					
Plastic (PMMA) Window Bonding/Polycarbonate						xx*					xx*
Window Glazing**									x	xx	xx
Sealing Exterior (Strong UV Radiation Zones)									x	xx	xx
Bonding Deck Fittings		x	x		x			x		x	xx
Bonding Through Hull	x	x			x		xx	xx			xx
Bonding Fiberglass to Fiberglass		x	x	x	x		xx	xx		xx	xx
Bonding Wood to Wood		x	x	x	x		xx	xx		xx	xx

PLEASE NOTE: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes. Properties are measured at 20°C and 50% humidity. Cure time can vary greatly on the substrates bonded.

<sup>‡</sup>Ratings, Certifications: 1=IMO; 2=Surface Flame Spread (ASTM E 162); 3=Smoke Generation (ASTM E 662); 4=Bombardier Toxic Gas (SP 800-C); 5=Crash Tested (FMVSS 212); 6=C920; 7=NSF R2

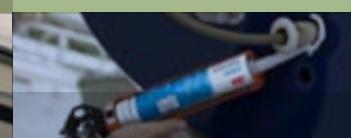
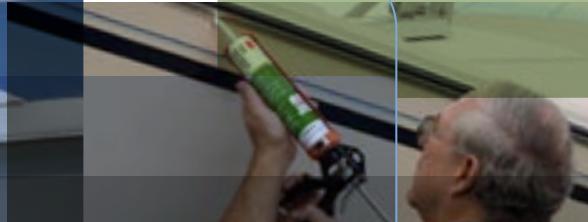
\*Refer to appropriate primers

\*\*Not to be used over uncured polyurethane

## Power Specs

- Chemical resistant
- Salt water resistant
- Non-yellowing

- UV resistant
- Above and below the waterline
- Varying open times



# Specialty Vehicles

## Driven to perform

Light weight. Flexibility. Bonding power with dissimilar materials (metal to glass, fiberglass to metal). Ability to seal out water, dust and noise. Smoke and flame resistance. Sound absorption. These are some of the key characteristics specialty vehicle manufacturers need from a bonding and sealing system. 3M™ Polyurethane and Hybrid Adhesives & Sealants deliver. They allow you to structurally bond and seal a wide range of materials, both similar and dissimilar—often replacing rivets, screws, bolts or even welds. The results? Quieter, lighter weight products with superior performance characteristics, often at lower costs.

## Power Specs

- Durability for the long haul
- Paintable
- UV resistant
- Light weight
- Flexible



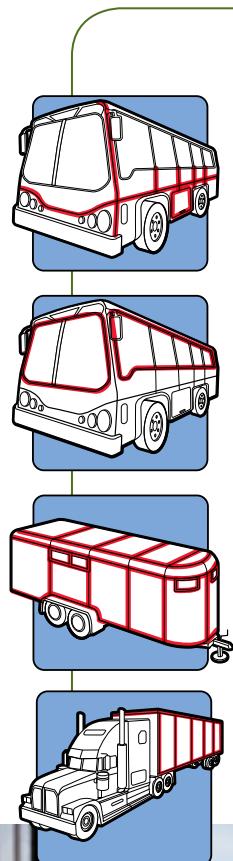
### POWER Line Products for Specialty Vehicle Manufacturing—Application Summary

	540	550	551	560	590	740	760	4000UV
Sealing	xx	xx	xx		x	xx	x	x
Bonding	x	x	x	xx	xx		xx	xx
Chemical Base	PU	PU	PU	PU	PU	Hybrid	Hybrid	Hybrid
Ratings, Certifications*	1,2,3,4,6	1,7		2,3,4,6	5	7	7	
Skin Time	90 min	60 min	2-3 hr	50 min	30 min	50 min	30 min	20 min
Cure Time	24 hr	24 hr	24-48 hr	24 hr	9-24 hr	24 hr	24 hr	24-48 hr
Paintable	After skin forms	After skin forms	After skin forms	After skin forms		Even when wet	Even when wet	Even when wet
<b>APPLICATIONS</b>								
Interior Sealing	x	x	x			x	x	x
Exterior Sealing	x	x	x			xx	xx	xx
Panel Attaching		x	x	xx			xx	xx
Floor/Sub Floor Bonding		x	x	xx			xx	xx
Roof Bonding		x	x	xx			xx	xx
Superior Long Term UV Resistance						xx	xx	xx
Glass Installation					xx			
Through-Wall Fire Proofing								
Wood	x	x	x	xx		x	xx	xx
Glass				x*	xx*			x*
Fiberglass	x	x	x	xx	x	x	xx	xx
Steel, Anodized Aluminum, Galvanized Metal	x	x	x	xx	x	x	xx	xx
ABS	x	x	x	x		x	x	x
PVC	x	x	x	x		x	x	x
Concrete/Stone	x	x	x	x		x	x	x

PLEASE NOTE: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes. Properties are measured at 20°C and 50% humidity. Cure time can vary greatly on the substrates bonded.

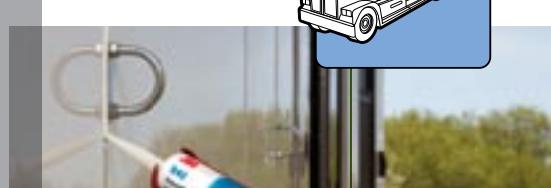
\*Ratings, Certifications: 1=IMO; 2=Surface Flame Spread (ASTM E 162); 3=Smoke Generation (ASTM E 662); 4=Bombardier Toxic Gas (SP 800-C); 5=Crash Tested (FMVSS 212); 6=C920; 7=NSF R2

\*Refer to appropriate primers



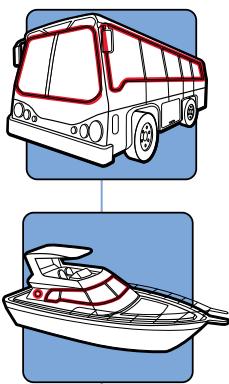
### A powerful combination

Easy-to-use, instant-bonding 3M™ VHB™ Tapes and 3M™ Polyurethane and Hybrid Adhesives & Sealants can make the ideal combination for many vehicle applications. 3M™ VHB™ Tapes bond on contact and feature viscoelastic properties that dampen noise and vibration, resulting in a quieter ride.



# Glass Bonding and Glazing

## A difference you can see



It takes a special polyurethane to form the bonds and seals around windows and glass. Moisture must be sealed out completely, yet flexibility is paramount to ensure a seal that won't dry out, withstands pounding and vibrations, and protects the glass. 3M™ Polyurethane and Hybrid Adhesives & Sealants and 3M™ Primers and Cleaners for windows and glass are specifically formulated for the unique characteristics and requirements of structural glass bonding and window glazing. Strong yet flexible. Crack resistant. They're ideal for structural windshield installations, PMMA windshield applications, hard-to-bond polycarbonates and acrylics, and flush-mounted glass for both marine and automotive use.



## POWER Line Products for Glass Bonding and Sealing—Application Summary

x = Good xx = Best choice

	SEALANTS		PRIMERS/CLEANERS				
	590*	4000UV*	P590	P591	P592	P595	C596
Sealing	xx	xx	N/A	N/A	N/A	N/A	N/A
Bonding	xx	xx	N/A	N/A	N/A	N/A	N/A
Primer/Cleaner**	N/A	N/A	P	P	P	P	C
Chemical Base	PU	Hybrid	NCO/MEK	NCO/MEK	Silane/Ethanol	NCO/MEK	Silane/Ethanol
Ratings, Certifications†	5		N/A	N/A	N/A	N/A	N/A
Skin Time	30 min	20 min	N/A	N/A	N/A	N/A	N/A
<b>GLASS APPLICATIONS</b>							
Tinted Glass Bonding	xx				x	xx	xx
Fritted Glass Bonding	xx		xx			xx	xx
Polycarbonate	xx	xx					xx
PMMA	xx	xx		xx			xx
Window Glazing**		xx					
<b>PRIMING SUGGESTIONS</b>							
Concrete/Stone/Marble/Brick	N/A	N/A				x	
Steel, Anodized Aluminum, Galvanized Metal	N/A	N/A			xx	x	
PVC	N/A	N/A			x	x	x
Polyester	N/A	N/A		xx			xx
Wood/Teak	N/A	N/A					x
Porosity Sealing	N/A	N/A				x	

PLEASE NOTE: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes. Properties are measured at 20°C and 50% humidity. Cure time can vary greatly on the substrates bonded.

†Ratings, Certifications: 5=Crash Tested (FMVSS 212)

\*Refer to appropriate primers

\*\*P=Primer C=Cleaner

\*\*Not to be used over uncured polyurethane

## Power Specs

- UV resistant
- Crack resistant
- Crash tested
- Permanent flexibility
- Hybrid technology for glazing and bonding



# General Industrial and Construction

## Power Specs

- Minimal shrinkage
- Permanent flexibility
- Non-bubbling/  
non-staining
- Fast-curing
- Superior  
weatherability



### Building better bonds

From sealing the sedimentation tanks of sewage treatment plants to filling expansion gaps in concrete, 3M's POWER Line has the ideal product for sealing and bonding. Besides a broad selection of polyurethane and high performance hybrid adhesives and sealants, there are primers, boosters, cleaners and applicator guns to help cut your costs, improve productivity and get the job done right. Construction applications include expansion, paver and slab control joints; cast-in-place, pre-fab and stamped concrete; brickwork, marble and granite; parking ramps, septic sealing, flashing and roof assembly; gap-filling on facades; and HVAC ductwork. Industrial applications include spas, appliances and anywhere else high humidity is a concern; metal fabrication and products that need to be hermetically sealed; as well as products that need to work in totally submerged environments.

**POWER Line Products for General Industry and Construction—Application Summary** x = Good xx = Best choice

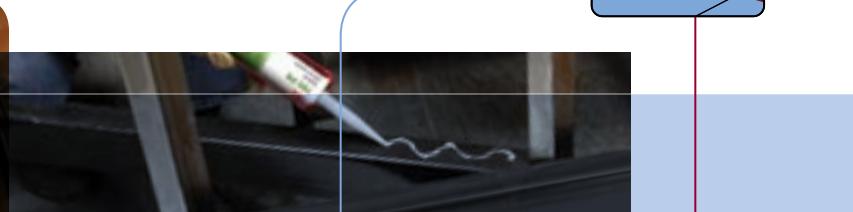
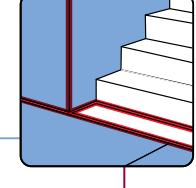
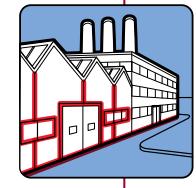
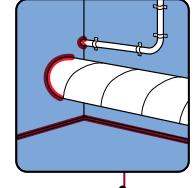
	525	535	540	550	560	5010	740	760
Sealing	xx	xx	xx	xx			xx	x
Bonding				x	xx	xx		xx
Chemical Base	PU	PU	PU	PU	PU	PU	Hybrid	Hybrid
Ratings, Certifications*	7	6	1,2,3,4,6	1,7	2,3,4,6		7	7
Skin Time			1-2 hr	1-2 hr	1 hr			
Cure Time	24 hr	1 hr	24 hr	24 hr				
Paintable	After skin forms		Even when wet	Even when wet				

APPLICATIONS	525	535	540	550	560	5010	740	760
Superior Long Term UV Resistance							xx	xx
Wood	x	x	x	x	x	xx	x	x
Glass								
Fiberglass	x	x	x	x	x	x	x	x
Steel, Anodized Aluminum, Galvanized Metal	x	x	x	x	x		x	x
ABS	x	x	x	x	x		x	x
PVC	x	x	x	x	x		x	x
Concrete/Stone/Marble/Brick	x	x	x	x	x	x	x	x
Roof Tile	xx	x						
Mineral Wool						x		
PVC/Aluminum Flashing Sealing	x							
Expansion Joints	xx	x						
EPS	x	x	x	x	x	x	x	x
Through-Wall Fire Proofing								
Thin Bond Lines, Fast Setting					xx			

PLEASE NOTE: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes. Properties are measured at 20°C and 50% humidity. Cure time can vary greatly on the substrates bonded.

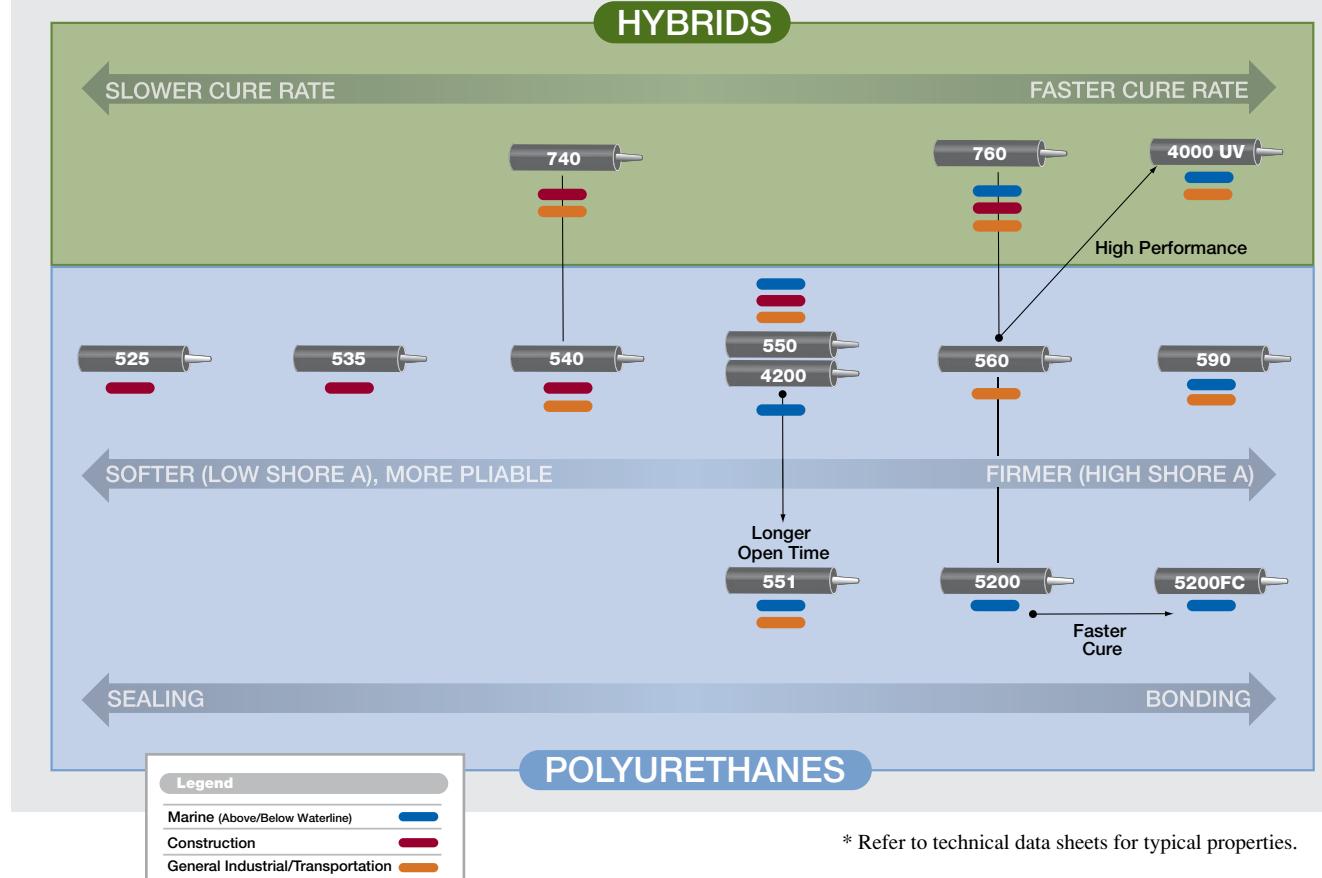
\*Ratings, Certifications: 1=IMO; 2=Surface Flame Spread (ASTM E 162); 3=Smoke Generation (ASTM E 662); 4=Bombardier Toxic Gas (SP 800-C); 6=C920; 7=NSF R2



## 3M™ Polyurethane and Hybrid Adhesives & Sealants

# Product Selector\*

### HYBRIDS



\* Refer to technical data sheets for typical properties.

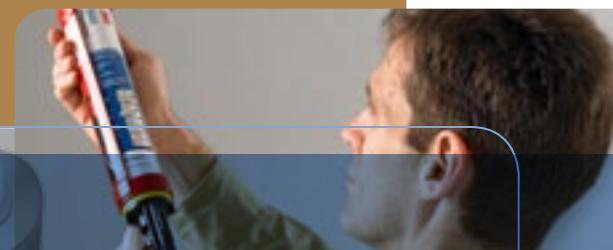
This chart graphically shows the depth and breadth of 3M™ Polyurethane and Hybrid Adhesives & Sealants. An important note to remember is that higher temperature and humidity will accelerate the cure rate of most adhesives and sealants. Because of this, 3M's POWER Line includes similar products with varying skin times—to help you maintain your production processes whatever the climate in your area.

In addition, as temperature and relative humidity increase, polyurethanes develop stronger holding power faster. So to achieve the results you're looking for, you can either change the adhesive or the ambient conditions. 3M technicians can help you find the best combinations for your needs.

#### ***The Importance of "Shore A Hardness"***

The Shore A Hardness number of a polyurethane adhesive or sealant can be the predictor of many properties. Products with lower Shore A numbers are more pliable and elastic with good recovery properties; this makes them excellent sealers. Products with higher Shore A numbers are firmer; this makes them better suited for creating permanent, secure bonds. Generally speaking, products with higher Shore A numbers have shorter skin times and cure faster. However,

our technical expertise and years of adhesive experience have allowed 3M to develop products with high Shore A's and long open times for the assembly of complex parts. Please consult with your 3M representative to help you choose the best products for your needs.



## Product Specifications

	Product	Industry	Skin Time (mins)	Cure Rate	Shore A Hardness	Elongation %	Modulus at 100% (psi)	Tensile Strength (psi)	Density	VOC g/L	Paintability
Polyurethanes (PU)	525	C	90 - 150	3mm/24hr	25	600%	44	N/A	1.17	82.6	Yes - When skin forms
	535	C	60 - 90	3mm/24hr	40	600%	58	250	1.17	94.3	
	5010	GI, CWW, C	3 - 5	N/A	N/A	N/A	N/A	N/A	1.05	2.1	
	540	GI, C, SV, M	60 - 90	3mm/24hr	40	600%	58	250	1.17	94.3	
	550	GI, C, SV, M	60 - 90	4mm/24hr	45	>600%	87	300	1.17	105.7	
	550 + B550 Booster	GI, C, SV, M	10 - 20	less than 24 hr for total cure	45	>250%	58	N/A	1.2	N/A	
	551	M, SV	120 - 180	4mm/24hr	45	>600%	87	N/A	1.17	92.2	
	560	GI, SV, M	50 - 60	4mm/24hr	55	>300%	145	580	1.17	73.0	
	590 OEM Glass	M, SV, W	25 - 40	>3.5mm/24hr	60 - 65	>700%	>870	1,000	1.2	34.7	
	4200	M	60 - 90	4mm/24hr	45	>600%	87	300	1.17	32	
	5200	M	>48 hrs	<1mm/24hr	68	>800%	N/A	700	1.36	40	
	5200FC	M	60 - 120	3mm/24hr	60	925%	N/A	600	1.21	38	
Hybrids	740	M, GI, C, SV	40-60	>3mm/24hr	>30	>300%	>140	N/A	1.65	22.0	Yes - Even when wet
	760	M, GI, C, SV	10-30	>3mm/24hr	55	>100%	>145	N/A	1.61	29.1	
	4000UV	M, SV, W	20-60	3mm/24hr	45	800%	N/A	300	1.4	16	

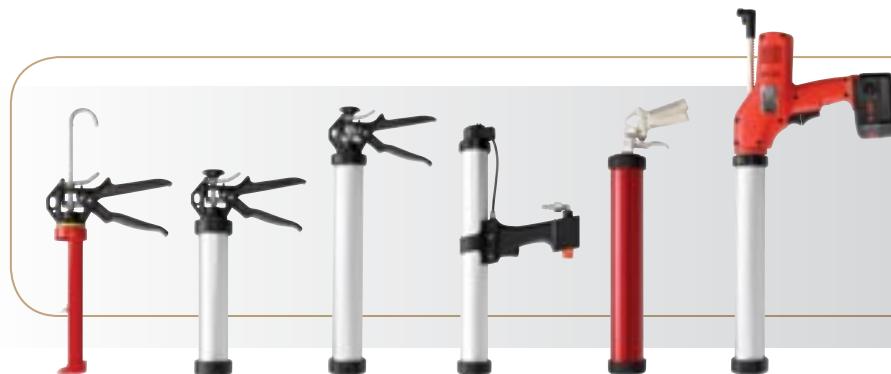
Industry Index: C = Construction, CWW = Custom Woodworking, GI = General Industrial, M = Marine, SV = Specialty Vehicle, W = Window

Primers and Cleaners		Color	Viscosity	Solids (%)	VOC g/L	Active Ingredient
P590 Fritted Glass Primer		Black	12-15 sec (DIN cup)	28.5	687	NCO/MEK
P591 Plastic Primer		Black	12-15 sec (Ford Cup)	36.5	613	NCO/MEK
P592 Metal Primer		Clear	Extremely low	1.5	790	Silane/Ethanol
P595 Teak & Glass Primer		Black	50 mPa*s	29.5	793	NCO/MEK
C596 Cleaner		Clear	Extremely low	3	798	Silane/Ethanol

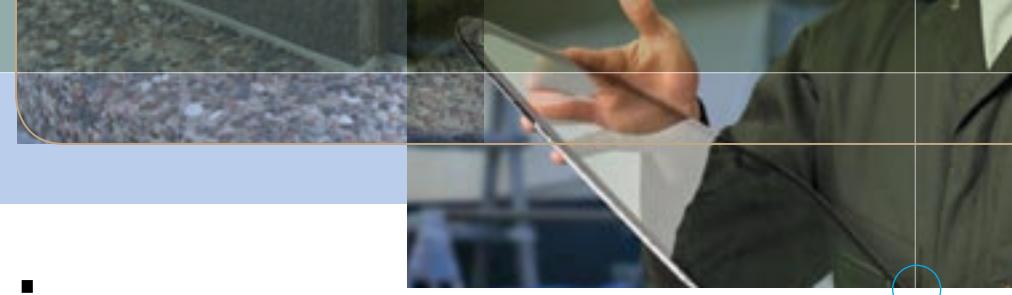
PLEASE NOTE: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes.  
Properties are measured at 20°C and 50% humidity. Cure time can vary greatly on the substrates bonded.

## Cleaners, primers, applicators

Besides a complete selection of polyurethane and high performance hybrid adhesives and sealants as well as primers, boosters and cleaners, 3M's POWER Line also includes a wide range of applicator guns—both powered and manual—designed to handle the most common cartridge and sausage pack sizes. Your 3M representative can help you select the right guns for your products and applications.



	310	400M	600M	600A	34A	643B
Power Source	Manual	Manual	Manual	Pneumatic	Pneumatic	Battery-Operated
310ml Cartridges	X	X	X		X	X
400ml Sausage Packs		X	X	X	X	X
600ml Sausage Packs			X	X		X



# The POWER Line: 3M™ Polyurethane and Hybrid Adhesives & Sealants

## Onsite testing

To help you find the right product to meet your exact job specifications and work environment, 3M offers comprehensive onsite testing. 3M technicians will visit your factory or production facility—virtually anywhere in the world—to make sure you not only select the product that matches your job specs and work conditions, but also optimize your results through proper product use. In addition, the 3M national authorized distributor network can provide sales assistance and local product availability.



## Color matching

If your application requires unique colors, 3M's POWER Line products can be customized to match. Consult your local 3M sales representative for program specifics.

**GENERAL GUIDELINES** **New color:** Minimum Annual Volume 15,000 cartridges, contact marketing for more information;  
**Existing colors:** non-standard MOQ 3,000 cartridge.

## A commitment to sustainability

3M has made a long-term commitment to continuously improve the environmental, health and safety impact of our products and processes. 3M's POWER Line already includes examples of this environmental leadership. Our non-isocyanate, low-VOC hybrid products are not only superior performing products, but can help you meet your organizational goals for a healthier and safer workplace and better environment.



For more information on 3M™ Polyurethane and Hybrid Adhesives & Sealants,  
go to [www.3M.com/adhesives](http://www.3M.com/adhesives) or call 1-800-362-3550.

**WARRANTY, LIMITED REMEDY, AND DISCLAIMER:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. User is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product.

3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.



**Industrial Adhesives**

**and Tapes Division**

3M Center

Building 220-5W-06

St. Paul, MN 55144-1000

1-800-362-3550

[www.3M.com/adhesives](http://www.3M.com/adhesives)

Please recycle. Printed in USA.

© 3M 2009. All rights reserved.

78-9236-7187-5

3M and VHB are trademarks of 3M.

USGBC is a trademark of the United States

Green Building Council.