Industrial Silicones Product Selection Guide

(##== Th

410

MI

NOVAGARD

וחבר









Novagard®, G623®, G624®, G635®, G661®, and Versilube®, along with associated logos and trade dress, are trademarks of Novagard Solutions, Inc. Other trademarks are the property of their respective owners. Any unauthorized use is expressly prohibited. All rights reserved.

The values outlined in the following tables reflect testing that was conducted under laboratory conditions, actual results may vary. Some data in the enclosed tables are derived from pre-production samples and are subject to change. The information provided in the tables is not intended for use in preparing specifications. Please consult your sales representative for additional info.

Whatever you're doing with your manufacturing Adhering Assembling Gasketing Protecting Lubricating

Silicone does it better.

Silicones are **inert synthetic compounds** whose main component is **silicon** combined to **oxygen**.

These silicon-oxygen linkages (called siloxanes) have an extended bond length and uncommonly open bond angle as compared with other materials – properties our scientists leverage into product performance.



Derived from sand, silicone's backbone is solvent and carbon-free, making it an eco-friendly and sustainable option.

It begins with the chemistry.

Product Performance Advantages:

- Protection against shock and vibration
- Flexible over a wide temperature range
- High dielectric strength and insulation resistance
- Resistant to chemicals and UV radiation
- Excellent adhesion to many substrates including metals and plastics
- Modifiable characteristics makes it the ideal material for just about any job

Novagard Silicone Advantages:

- Multiple cure technologies
- Great adhesion
- Wide viscosity range
- Quality products meeting the
- highest industry standards
- PFAS free

Silicone does it better. And nobody does silicone better than Novagard.

It continues with our formulations.

With over 35 years of silicone experimentation and development, Novagard offers you a broad line of proven silicone products. And with no harmful VOC emissions or outgassing, our 100% solid materials are simply safer for people and the planet, while removing complexity, cost, and time from your manufacturing processes.

Adhering_{p4} Assembling_{p4} Gasketing_{p14} Protecting_{p20}

Adhesive Pastes

	400-1xx page 6	900-1xx page 7	500-09x page 7	400-195 page 8	400-196 page 8	400-202 page 8	400-590 page 9	500–600 (Part A/Part B) page 9	900-5xx page 10	400-110 400-118 page 11	400-155 page 11	500-642 (Part A/Part B) page 12	400-900 400-950 page 13
Essential Attributes	G	General Purpos	e			Fast Cure				High St	trength		Low Adhesion
						PHYSICAL	PROPERTIES						
Appearance	Paste, various colors	Paste, various colors		Paste, translucent	Paste, translucent	Paste, black	Paste, black	Paste, black / Paste, white	Paste, various colors	Paste, black or gray	Paste, translucent	Paste, black / Paste, off-white	Paste, white or trans.
Cure Chemistry	Oxime Silicone	Alkoxy Hybrid		Oxime Silicone	Oxime Silicone	Oxime Silicone	Oxime Silicone	Alkoxy Silicone	Alkoxy Hybrid	Oxime Silicone	Oxime Silicone	Alkoxy Silicone	Oxime Silicone
Viscosity (cPs)	450,000-750,000	225,000-650,000		350,000-800,000	200,000-400,000	350,000-800,000	-	75,000-150,000 / 40,000-55,000	450,000-900,000	-	-	150,000-400,000 / 35,000-100,000	320,000-550,000/ 150,000-250,000
Skin-Time	5 - 10 min	15 - 45 min		4 - 7 min	4 - 10 min	4 - 7 min	<15 min	<10 min	15 - 45 min	3 - 10 min	5 - 15 min	-	30 - 40 min
Through Cure	24 hrs	-	Coming Soon	24 hrs	24 hrs	24 hrs	<24 hrs	-	4 days	2 - 24 hrs	3 - 6 hrs	-	24 hrs
Tensile Strength	160 - 200 psi	250 - 400 psi		150 - 200 psi	150 - 200 psi	150 - 200 psi	200 - 300 psi	200 - 300 psi	350 - 450 psi	300 - 400 psi	>200 psi	175 - 275 psi	200 - 250 psi
Elongation	500 - 600%	250 - 400%		500 - 600%	500 - 600%	500 - 600%	400 - 500%	300 - 400%	350 - 550%	300 - 400%	>300%	250 - 350%	250 - 350%
Hardness (Shore A)	25 ± 5	45 - 55		20 ± 5	20 ± 5	20 ± 5	>40	35 - 45	40 ± 5	>20	20 - 40	45 - 50	40 ± 5
Adhesion	glass, aluminum, Lexan®	glass, aluminum, concrete, wood, PVC		glass, aluminum, wood	glass, aluminum, wood	glass, aluminum, Lexan®	chrome plated plastic, acrylic coated metal	glass, aluminum, steel, ceramic	glass, aluminum, wood	chrome plated plastic, acrylic coated metal	glass, aluminum, wood	chrome plated plastic, acrylic coated metal	no bond

Discovering the best method to bond components together for a specific application is about the most common challenge in manufacturing.

Novagard strives to produce exceptional solutions with sustainable silicone technology that meets all performance goals within harsh environments.





General Purpose Adhesive Pastes

400-1xx series

General Purpose Oxime-Cure Silicone Paste 400-1xx

400-1xx is a single-component, non-sagging silicone paste that cures to a low to medium modulus, rubberlike solid. The cure mechanism is neutral (oxime), which cures on exposure to moisture in room temperature air. It is non-corrosive to metal substrates such as aluminum and ferrous metals (with adequate ventilation).

This ready-to-use adhesive sealant skins over in 5 - 10 minutes, and bonds to most common substrates without the use of a primer. With a lower odor than conventional acetoxy-cured silicones, this general purpose silicone is used in any area where the weather and environment needs to be sealed out.



400-100 (white) 400-102 (black) 400-103 (aluminum) 400-108 (gray) 400-150 (translucent)

Applications include:

- Substitute for mechanical fasteners
- Formed-in-place gaskets
- Sealing refrigerator & freezer liners
- Adhering plastic moldings
- Waterproofing electrical components
- Sealing coaxial connectors
- Protecting instrumentation assemblies

Paste, various colors	Appearance
Oxime Silicone	Cure Chemistry
450,000-750,000	Viscosity (cPs) Brookfield #7 @ 10 rpm
5 - 10 min	Skin-Time 3/8" @ 50% RH & 77°F
24 hrs	Through Cure 3/8" @ 50% RH & 77°F
160 - 200 psi	Tensile Strength ASTM D412
500 - 600%	Elongation ASTM D412
25 ± 5	Hardness (Shore A) ASTM D2240
12 - 15 pli 10 - 14 pli 12 - 15 pli	Adhesion ASTM C794 Glass Aluminum Lexan®
1.15 - 1.25	Specific Gravity
30 – 35 pli	Tear Resistance ASTM D624
30 - 80 g/min	Extrusion Rate 1/8" orifice @ 50 psi
−40°F to 400°F (-40°C to 204°C)	Service Temp

General Purpose Silicone-Free Hybrid Adhe 900-1xx

Functioning as an alkoxy-cure hybrid adhesive s this silicone-free paste bonds to most substrates the use of a primer. A paintable adhesive, it is ic sealing materials with dissimilar coefficients of ex Suitable for use in automotive paint facilities and environments that must remain silicone free.

900-100 (white) **900-102** (black)

Applications include:

- Metal-to-metal bonding
- Adhering to plastics, fiberglass, glass, and all commo industrial substrates

UL94 VO Alkoxy Silicone Paste (1-part sealant) 500-09x COMING SOON

500-09x is a neutral cure (alkoxy), UL94 V0 rated paste for applications that require superior bond and flame resistance.

This one-part paste has a good balance of tensile strength and elongation and cures to a tough, resilient rubber. When a non-corrosive product is required, 500-09x is an unprimed adhesive solution that delivers a more uniform bond, acts like a gasket to protect against moisture and dust, and helps dampen vibrations. This paste is safe for electronics applications.

500-09x skins over in 5 – 15 minutes, and is completely cured within 72 hours. Specially formulated to retain its physical properties even during service in extreme environmental conditions, it is ideal for applications that require superior bond strength and a UL94 V0 rating.



		900-1xx series	500-09x
esive	Appearance	Paste, various colors	
sealant,	Cure Chemistry	Alkoxy Hybrid	
s without deal for xpansion.	Viscosity (cPs) Brookfield #7 @ 10 rpm	225,000- 650,000	
other	Skin-Time 3/8" @ 50% RH & 77°F	15 - 45 min	
	Tensile Strength ASTM D412	250 - 400 psi	
on	Elongation ASTM D412	250 - 400%	Coming
	Hardness (Shore A) ASTM D2240	45 - 55	Soon
	Adhesion ASTM C794 Glass Aluminum Concrete Wood PVC	7 - 13 pli 9 - 14 pli 9 - 17 pli 7 - 17 pli 7 - 12 pli	
d black I strength	Specific Gravity	1.35 - 1.45	
nsile	Extrusion Rate 1/8° orifice @ 50 psi	>100 g/min	
resilient red, elivers a t against	Slump Boeing Jig ASTM D2202	<0.1"	

Applications include:

- Frame and junction box sealant in photovoltaic modules, sensitive electronic components, and circuit boards
- General industrial sealing and bonding applications requiring a non-corrosive product

Fast-Cure Adhesive Pastes

400-195 400-196 400-202

Fast-Cure Oxime Paste 400-195 / 400-196 / 400-202

400-195 and 400-202 are non-flowable, non-sagging pastes that provide a fast tack free time and high green strength. 400-196 has similar physical properties in a softer and slumpier uncured form. The fast tack and early strength of these materials combine to hold the assembly together as a unit moves from station to station, outperforming slower materials in multi-step assembly applications.

The cure mechanism is neutral (oxime), curing on exposure to moisture in room temperature air. They are non-corrosive to metal substrates such as aluminum and ferrous metals (with adequate ventilation), and offer excellent adhesion to numerous substrates including metals and plastics. These smooth pastes cure to a low to medium modulus, rubber-like solid, and are ideal for applications that require superior bond strength and moisture resistance.

400-195 can serve as a drop-in replacement for DOWSIL[™] 737 Neutral Cure Sealant. 400-195 and 400-202 are listed on the GM 9985557 / GMW18180 specifications.

400-195 (translucent) 400-196 (translucent) 400-202 (black)

Applications include:

- Component assembly
- Component staking
- Formed-in-place gaskets

Appearance	Paste, translucent	Paste, translucent	Paste, black
Cure Chemistry	Oxime Silicone	Oxime Silicone	Oxime Silicone
Viscosity (cPs) Brookfield #7 @ 10 rpm	350,000- 800,000	200,000- 400,000	350,000- 800,000
Skin-Time 3/8" @ 50% RH & 77%	4 - 7 min	4 - 10 min	4 - 7 min
Through Cure 3/8" @ 50% RH & 77%	24 hrs	24 hrs	24 hrs
Tensile Strength ASTM D412	150 - 200 psi	150 – 180 psi	150 - 200 psi
Elongation ASTM D412	500 - 600%	500 - 600%	500 - 600%
Hardness (Shore A) ASTM D2240	20 ± 5	20 ± 5	20 ± 5
Adhesion ASTM C794 Glass Aluminum Wood Lexan®	12 - 15 pli 10 - 14 pli 12 - 15 pli -	12 - 15 pli 10 - 14 pli 12 - 15 pli -	12 - 15 pli 10 - 14 pli - 12 - 15 pli
Specific Gravity	1.00 - 1.05	1.00 - 1.05	1.00 - 1.05
Tear Resistance ASTM D624	30 – 35 pli	30 – 35 pli	30 - 35 pli
Extrusion Rate 1/8° orifice @ 90 psi	>100 g/min	-	>100 g/min
Dielectric Strength ASTM D149	>27.9 kV/mm (708 V/mil)	-	-
Volume Resistivity ASTM D257	1.5x10⁵Ω−cm	-	-
Specifications	GM 9985557 GMW18180	-	GM 9985557 GMW18180

Blow Out Resistant Oxime-Cure Silicone Past 400-590

400-590 is a single-component, moisture-curing silicone paste that cures to a low to medium modulus, rubber-like solid. The cure mechanism is neutral (oxime), curing on exposure to moisture in room temperature air. It is non-corrosive to metal substrates such as aluminum and ferrous metals (with adequate ventilation), and offers excellent adhesion to numerous substrates including metals and plastics.

This ready-to-use adhesive sealant skins over in less than 15 minutes, and has a tensile strength of 200-300 psi after fully cured. When used as a blow-out resistant aasket (such as an automotive rear differential), 400-590 can withstand a 4 psi pressure test after 5 minutes. 400-590 is a smooth, black paste that is ideal for applications that require superior bond strength and moisture resistant sealing in automotive and industrial arenas.

Applications include:

• Formed-in-place gaskets that must be pressurized immediately after assembly

Two-Component Fast-Cure Silicone Paste 500-600

Designed with a simple 2:1 fixed ratio for easy handling, this 2-component industrial adhesive is ideal for high-speed assembly. 500-600 is a very quick curing material with less than 5 minutes open time. It rapidly builds green strength to allow parts to move swiftly from station to station in the assembly process without shifting. It is a medium modulus material with a balanced adhesion profile, and its low viscosities reduce strain on dispensing equipment. 500-600 adheres to many industrial substrates, including aluminum, steel, ceramic, ceramic glass, and polyester coated aluminum.

Applications include:

NOVAGARD

- General industrial assembly
- Consumer products assembly

400-590 500-600 (Part A/Part B)

k	2	
ł	5	7

Shear Stress
ASTM D1002
(@25°C/50% RH)
Ceramic Glass to Stainless Steel
Ceramic Glass to Aluminum
Stainless Steel
Polyester Painted Aluminum
Ceramic Glass
Ceramic Tile
Galvalume
Aluminum
Glass

Appearance	Paste, black	Paste, black Paste, white
Cure Chemistry	Oxime Silicone	Alkoxy Silicone
Viscosity (cPs) Brookfield #7 @ 10 rpm	-	75,000-150,000 40,000-55,000
Base Ratio by Volume	n/a	2:1
Base Ratio by Weight	n/a	1.6:1
Mixed Color	n/a	black
Mixed Specific Gravity	n/a	1.4
Snap Time	n/a	<10 min
Tack-Free Time	n/a	<10 min
Working Time	n/a	<5 min
Skin-Time 3/8" @ 50% RH & 77%	<15 min	<10 min
Through Cure 1/8" @ 50% RH & 77°F	<24 hrs	-
Tensile Strength ASTM D412	200 – 300 psi	200 - 300 psi
Elongation ASTM D412	400 - 500%	300 - 400%
Hardness (Shore A) ASTM D2240	>40	35 - 45
Adhesion ASTM C794 (7 days @75°F/100% RH) Chrome Plated Plastic Acrylic Coated Metal	>20 pli >20 pli	E
Specific Gravity	1.30 - 1.45	-
Extrusion Rate 1/8" orifice @ 90 psi	45-120 g/min minimum	-
Slump Boeing Jig ASTM D2202	<0.3"	<0.3"
Chemical Resistance Novagard Test Method Gasoline Break Fluid Antifreeze Wheel Cleaner	no effect	-
Shear Stress ASTM DIO2 (@25°C/50% RH) amic Glass to Stainless Steel Ceramic Glass to Aluminum Stainless Steel Polyester Painted Aluminum Ceramic Glass Ceramic Tile Galvalume Aluminum Glass	-	150 - 200 psi 150 - 250 psi 150 - 200 psi 100 - 150 psi 100 - 200 psi 150 - 250 psi 150 - 250 psi 175 - 225 psi 125 - 175 psi

High Strength Adhesive Pastes

Heavy-Duty Fastening Silicone-Free Hybrid **Paste Sealant** 900-5xx

Use our heavy-duty high strength fastening hybrid paste for bonding in a single step. This remarkable, silicone-free adhesive can replace rivets, screws, welds, and other mechanical fasteners. Extremely peel and tear resistant, our 900-5xx series bonds to most substrates without the use of a primer.

Novagard 900-5xx series can be used in place of Sikaflex® 552 or 252, and Manus-Bond 25-AM. With a viscosity of 450,000 - 900,000 cPs, this non-corrosive paste skins over in 15 – 45 minutes, and is thoroughly cured in 4 days. 900-5xx can be painted after 1 hour.

900-502 (black) 900-511 (gray)

Applications include:

Vehicle coachwork assembly

• Exterior building waterproofing



Selecting the right sealant Silicones sit on top of the

sealant hierarchy as they are the only inorganic sealant that will not degrade over time. However, some applications call for an organic hybrid.

Novagard hybrids offer many of the same qualities as a silicone - no solvents, low VOC, and are high in solid material content. Hybrids will not shrink or crack even when exposed to harsh weather. They are paintable and will bond to most substrates without primer, making hybrids ideal for sealing materials with dissimilar coefficients of expansion.



High Strength Oxime-Cure **Silicone Paste** 400-110 / 400-118 / 400-155

400-110, 400-118, and 400-155 are nonflowable, non-sagging pastes that are ideal for industrial applications that require superior bond strength and moisture resistance. These cure to a low to medium modulus, rubber-like solid.

The cure mechanism is neutral (oxime), curing on exposure to moisture in room temperature air. It is non-corrosive to metal substrates such as aluminum and ferrous metals (with adequate ventilation), and offers excellent adhesion to numerous substrates including plastics and metals. These ready-to-use adhesive sealants skin over in 3 – 15 minutes, and are well suited to sealing and bonding applications within many arenas.



400-110 (black) 400-118 (gray) 400-155 (translucent)

Applications include:

- High strength bonding
- Deep section cure applications

900-5xx series

400-155

400-110 400-118

Appearance	Paste, black or gray	Paste, translucent
Cure Chemistry	Oxime Silicone	Oxime Silicone
Skin-Time 3/8" @ 50% RH & 77%	3 - 10 min	5 - 15 min
Through Cure 1/8" @ 50% RH & 77°F	2 - 24 hrs	3 - 6 hrs
Tensile Strength ASTM D412	300 - 400 psi	>200 psi
Elongation ASTM D412	300 - 400%	>300%
Hardness (Shore A) ASTM D2240	>20	20 - 40
Adhesion ASTM C794 (7 days @ 75ºF/100% RH) hrome Plated Plastic Acrylic Coated Metal	>20 pli >20 pli	-
Adhesion ASTM C794 (7 days @ 75°F/100% RH) Glass Aluminum Wood	-	>20 pli >20 pli >20 pli >20 pli
Specific Gravity	1.04 - 1.16	1.00 - 1.05
Extrusion Rate 1/8° orifice	>100g/min (@ 90 psi)	>40g/min (@ 50 psi)
Slump Boeing Jig ASTM D2202	<0.3"	-
Chemical Resistance Novagard Test Method Gasoline Break Fluid Antifreeze Wheel Cleaner	no effect	-
Specifications 400-110	MSCD135 GMW18180	
400-118	MSCD135 GM 9985557 GMW18180	

Cł

High Strength Adhesive Pastes

500-642 (Part A/Part B)

Low Adhesion Pastes

Two-Component High-Performance Fast-Cure Silicone Paste 500-642

With its simple 2:1 fixed ratio, 500-642 is a 2-component industrial adhesive designed for easy handling and with low viscosities to reduce strain on dispensing equipment. This high modulus material offers a strong adhesion profile and is formulated to stand up to harsh conditions for maximum longevity, such as high temperature water immersion testing. With a typical open time of 6 – 9 minutes, 500-642 rapidly builds green strength, allowing parts to move from station to station swiftly in the assembly process. 500-642 bonds securely to a variety of industrial substrates including metals, glass, and polyester paint.



Applications include:

• Bonding of wheel cladding, exterior fixturing, exposed junction boxes, and enclosures

Paste, black Paste, off-white	Appearance
Alkoxy Silicone	Cure Chemistry
150,000-400,000 35,000-100,000	Viscosity (cPs) Brookfield HB #6 @ 20 rpm
1.40 - 1.45 1.67 - 1.72	Specific Gravity
>150g/min >1,000 g/min	Extrusion Rate 1/8" orifice @ 90 psi
2:1	Base Ratio by Volume
1.5:1	Base Ratio by Weight
black	Mixed Color
1.48 - 1.52	Mixed Specific Gravity
<0.1"	Slump Boeing Jig ASTM D2202
5 - 10 min	Snap Time
5 - 20 min	Tack-Free Time
175 - 275 psi	Tensile Strength ASTM D412
250 - 350%	Elongation ASTM D412
45 - 50	Hardness (Shore A) ASTM D2240
>80 lbf >80 lbf	Adhesion Pull Tab Adhesion Test Chrome Plated Plastic Acrylic Coated Metal

Low Adhesion Oxime-Cure Removable Silicone Paste 400-900/400-950

400-900 and 400-950 are single-component, moisture-curing silicone pastes that cure to a rubber-like solid and are easily removed. These ready-to-use sealants skin over in 30 – 40 minutes.

The cure mechanism is neutral (oxime), curing on exposure to moisture in room temperature air. These non-flowable, non-sagging low-adhesion pastes are ideal for creating formed-in-place gaskets where re-entry or post production disassembly is necessary. It is non-corrosive to metal substrates such as aluminum and ferrous metals (with adequate ventilation).



400-900 (white) **400-950** (translucent)

Applications include: • Removable gaskets

• Temporary seals

400-900 400-950

Paste, white or trans.	Appearance
Oxime Silicone	Cure Chemistry
320,000-550,000 150,000-250,000	Viscosity (CPS) Brookfield #7 @10 rpm
30 - 40 min	Skin-Time 3/8' @ 50% RH & 774
24 hrs	Through Cure 3/8' @ 50% RH & 77%
200 – 250 psi	Tensile Strength ASTM D412
250 - 350%	Elongation ASTM D412
40 ± 5	Hardness (Shore A) ASTM D2240
no bond	Adhesion ASTM C794 Glass Aluminum Plastics
1.20 - 1.30 1.00 - 1.05	Specific Gravity

Gasketing Materials

	800–220 [*] page 16	200–273 [*] page 17	400–195 page 18	800-400 800-401 page 19	400-900 400-950 page 19	
Essential Attributes	Screen Printable		Pastes			
	PHYSICAL PROPERTIES					
Appearance	Fluid, translucent	Fluid, iron oxide red	Paste, translucent	Paste, translucent and opaque	Paste, white and translucent	
Cure Chemistry	UV Only Silicone	Oxime Silicone	Oxime Silicone	UV Only Silicone	Oxime Silicone	
Viscosity (cPs)	16,500	19,000-24,000	350,000-800,000	360,000	320,000-550,000 150,000-250,000	
Skin-Time	-	<60 min	4 - 7 min	-	30 - 40 min	
Through Cure	-	-	24 hrs	-	24 hrs	
Tensile Strength	128 psi	-	150 - 200 psi	377 psi 100 - 200 psi	200 - 250 psi	
Elongation	265%	-	500 - 600%	1,200% 900 - 1,200%	250 - 350%	
Hardness (Shore A)	25	-	20 ± 5	20 15 - 25	40 ± 5	
Adhesion	-	-	glass, aluminum, wood	_	no bond	

*Preliminary data

Looking to properly seal joints to limit vibration, prevent leaks, enhance mounting, and increase throughput? Silicone is an excellent solution for complex formed-in-place (FIPG) or cured-in-place (CIPG) gaskets.

Novagard's high performance silicones are all low VOC, making them better for your manufacturing environment and our planet overall.



NOVAGARD

Screen Printable Gasketing

800-220

Screen Printable UV Cure Gasket 800-220

While many gaskets can be dispensed using robotic application techniques, complex gaskets present unique manufacturing challenges. Our 800-220 UV cure silicone is specifically designed to be screen printed, allowing the creation of complex gaskets in a single step. Follow the screen printing process with a dose of UV energy, and the gasket will be fully cured and ready for further processing. Use 800-220 for high-speed manufacturing involving complex gasketing requirements.

Applications include:

- Industrial water filtration manufacturing
- Complex shape gaskets

Two approaches to gasketing



CIPG: Adheres to one side of substrate



FIPG: Adheres to both sides of substrate

CIPG (Cured-in-Place Gasket) provides greater gasket design flexibility and allows the opening and closing of lids to repair components inside.

FIPG (Formed-in-Place Gasket) adheres to both substrates. ideal for non-reenterable enclosures.



Preliminary data. Full data set expected in late 2023. Lab samples are currently available.

Screen Printable Engine Gasket 200-273

Designed to simplify the creation of complex gaskets, 200-273 is a single component, moisture cure oxime silicone. Formulated with industry standard iron oxide red pigmentation for rapid identification of gasketing surface and defect monitoring, 200-273 simplifies the curing process by utilizing atmospheric moisture – no other processing or treatment required. 200-273 offers good adhesion to allow the newly printed gasket to remain firmly in place until the next assembly step.



Applications include:

- Engine gaskets
- High stress gasketing applications



Preliminary data. Full data set expected in 2024.

Gasketing Pastes

400-195

Fast-Cure Oxime-Cure Silicone Paste 400-195

400-195 is a non-flowable, non-sagging paste that provides a fast tack free time and high green strength. The fast tack and early strength combine to hold the assembly together as a unit moves from station to station, outperforming slower materials in multi-step assembly applications.

The cure mechanism is neutral (oxime), curing on exposure to moisture in room temperature air. It is non-corrosive to metal substrates such as aluminum and ferrous metals (with adequate ventilation), and offers excellent adhesion to numerous substrates including metals and plastics. This smooth paste cures to a low to medium modulus, rubber-like solid, and is ideal for applications that require superior bond strenath and moisture resistance.

This translucent paste can serve as a drop-in replacement for DOWSIL[™] 737 Neutral Cure Sealant.

Applications include:

- Component assembly
- Component staking
- Formed-in-place gaskets



Lighten up your automotive application By injecting 400-195 with nitrogen, manufacturers are extending the coverage of each ounce of silicone while reducing the weight by up to 50%. Spec'd for use in GM 9985557 and GMW18180.

Paste, translucent	Appearance
Oxime Silicone	Cure Chemistry
350,000-800,000	Viscosity (cPs) Brookfield #7 @ 10 rpm
4 - 7 min	Skin-Time 3/8" @ 50% RH & 77%
24 hrs	Through Cure 3/8" @ 50% RH & 77°F
150 - 200 psi	Tensile Strength ASTM D412
500 - 600%	Elongation ASTM D412
20 ± 5	Hardness (Shore A) ASTM D2240
12 - 15 pli 10 - 14 pli 12 - 15 pli	Adhesion ASTM C794 Glass Aluminum Wood
1.00 - 1.05	Specific Gravity
30 – 35 pli	Tear Resistance ASTM D624
>27.9 kV/mm (708 V/mil)	Dielectric Strength ASTM D149
1.5x10¹⁵Ω−cm	Volume Resistivity ASTM D257
GM 9985557 GMW18180	Specifications

UV Cure Silicone Paste 800-400/800-401

With typical viscosity of 360,000 cPs, 800-400 and 800-401 are UV-only, fast-curing pastes the consistently hold their shape even when dispen into complex patterns. With its nearly instant UV c these are widely used for automated dispensing cured-in-place gaskets (CIPG). These non-corros single component silicones offer a room tempera cure in seconds upon exposure to ultraviolet (UV)

100% solids with no solvents, both are thermally stable from -40°F to 392°F (-40°C to 200°C). These materials will cure a 1/2" bead with a Mercury H bulb, or a 3/4" bead with a 365nm LED bulb. They can be applied by automated needle dispense, jetting, or hand dispense.

800-400 (non-adhesive) 800-401 (adheres to plastic)

Applications include:

- Printed circuit/wiring boards
- Flexible hybrid electronics
- Riaid electronics
- Sensitive components in harsh environments
- Gasketing and sealing

Low Adhesion Oxime-Cure **Removable Silicone Paste** 400-900/400-950

400-900 and 400-950 are single-component, moisturecuring silicone pastes that cure to a rubber-like solid and are easily removed. These ready-to-use sealants skin over in 30 – 40 minutes.

The cure mechanism is neutral (oxime), curing on exposure to moisture in room temperature air. These non-flowable, non-sagging low-adhesion pastes are ideal for creating formed-in-place gaskets where re-entry or post production disassembly is necessary. It is non-corrosive to metal substrates such as aluminum and ferrous metals (with adequate ventilation).

400-900 (white) 400-950 (translucent)

Applications include:

 Removable seals • Temporary seals

800-400 400-900 800-401 400-950

at
nsed
ure,
and
sive,
ature
) light.

Appearance	Paste, translucent and opaque	Paste, white and translucent
Cure Chemistry	UV Only Silicone	Oxime Silicone
Viscosity (cPs) Brookfield #7 @ 10 rpm	360,000 Brookfield #6 @ 10 rpm	320,000- 550,000 150,000- 250,000
Skin-Time 3/8" @ 50% RH & 77°F	-	30 - 40 min
Through Cure 3/8" @ 50% RH & 77%	-	24 hrs
Tensile Strength ASTM D412	377 psi 100 - 200 psi	200 - 250 psi
Elongation ASTM D412	1,200% 900 - 1,200%	250 - 350%
Hardness (Shore A) ASTM D2240	20 15 - 25	40 ± 5
Adhesion ASTM C794 Glass Aluminum Plastics		no bond
Specific Gravity	1.11 1.05 - 1.20	1.20 - 1.30 1.00 - 1.05
Extrusion Rate 1/8" orifice @ 50 psi	>240 g/ min	-
Dielectric Strength ASTM DI49	14.9 kV/mm (378 V/mil) -	-
Dielectric Constant (100Hz) ASTM DI50	3.34 -	-
Dielectric Constant (100kHz) ASTM D150	3.33 -	-
Dissipation Factor (100Hz) ASTM D150	0.0011 -	-
Dissipation Factor (100kHz) ASTM D150	0.0021 -	-
Volume Resistivity ASTM D257	3.01 x10 ¹³ Ω−cm	-

Protective Coatings & Sealants

		200-202	200-257	200-107	900-92x*	900-212*	200-252	600-200	600-205
	Essential Attributes	page 22	page 22	page 23	page 23	page 24	page 24	(Part A/Part B) page 25	(Part A/Part B) page 25
					PHYSICAL	PROPERTIES			
	Appearance	Fluid, black	Fluid, translucent	Fluid, white	Fluid, black, gray, white	Paste, black	Fluid, translucent	Fluid, clear	Fluid, clear
С	ure Chemistry	Oxime Silicone	Oxime Silicone	Oxime Silicone	Alkoxy Hybrid	Alkoxy Hybrid	Oxime Silicone	2-Component Platinum Silicone	2-Component Platinum Silicone
V	'iscosity (cPs)	20,000-35,000	70,000-110,000	70,000-110,000 (@20 rpm) 90,000-120,000 (@10 rpm)	-	838,000 (1Hz) 187,500 (5Hz) 97,000 (10Hz)	8,000-12,000	2,000-4,000 2,000-4,000	3,000-5,000 3,000-5,000
	Skin-Time	<20 min	<20 min <30 min 57 - 63 hrs 24 - 30 hrs		10 - 25 min	<50 min	<20 min	-	-
	Through Cure	57 - 63 hrs			7 days	7 days	<24 hrs	-	-
Те	ensile Strength	50 - 100 psi	50 - 100 psi	200 psi	175 - 225 psi	-	30 - 50 psi	-	-
	Elongation	245 - 300%	245 - 300%	250%	250 - 300%	-	80 - 120%	-	-
На	Irdness (Shore A)	15 ± 5	15 ± 5	25 ± 5	45 ± 5	46	20 ± 5	-	-
	Adhesion	_	-	glass, aluminum	glass, aluminum, wood, PVC	-	-	-	-

*Preliminary data

Whether it's a delicate circuit board, the sturdy steel joint on the frame of an RV, or the fabric of a stitched seam, applying the right material to protect it is essential.

Novagard offers you advanced silicone-based solutions developed by our R&D center of excellence. Our scientists are focused on innovative and eco-friendly products that meet your needs and fit seamlessly into your manufacturing process.



Protective Coatings & Sealants

200-202 200-257

.

Oxime-Cure Self-Leveling Silicone (Mil Spec) 200-202

200-202 is a single-component, conformal coating that is preferable to paste-consistency products where flow coating is the chosen application method and when flow into small crevices and hard-to-reach places is desired. It utilizes a moisture cure system at room temperature to result in a tough, resilient, silicone rubber that has good adhesion to most common industrial substrates, and will not corrode aluminum and ferrous metals (with adequate ventilation).

This oxime-cured silicone has a viscosity of 20,000 – 35,000 cPs and skins over in less than 20 minutes.

Applications include:

- Coating intricate electrical and mechanical devices
- Insulating electrical terminals
- Pin/solder joint coverage
- Thin section potting/ encapsulation
- Sealing and bonding applications where low viscosity and self-leveling properties
- are required

Oxime-Cure Semi-Flowable Silicone 200-257

200-257 is a single-component, oxime-cure silicone for use in applications where the coating needs to settle into small crevices and hard to reach areas. 200-257 utilizes a moisture cure system at room temperature to result in a tough, resilient, silicone rubber that retains enough thixotropy to prevent leakage during the cure cycle.

200-257 has a viscosity of 70,000 – 110,000 cPs and skins over in less than 20 minutes. This semi-flowable silicone's gap-filling properties offer superior quality and long-term durability, particularly upon exposure to hostile environmental conditions.

Applications include:

- Coating intricate electrical and mechanical devices
- Insulating electrical terminals
- Pin/solder joint coverage
- Thin section potting/encapsulation and sealing
- Bonding applications where low viscosity and self-leveling properties are required
- Can be used as a low-profile dam in dam-and-fill applications

Appearance	Fluid, black	Fluid, translucent
Cure Chemistry	Oxime Silicone	Oxime Silicone
Viscosity (cPs) Brookfield #6 @ 10 rpm	20,000-35,000	70,000-110,000
Skin-Time 3/8" @ 50% RH & 77°F	<20 min	<20 min
Through Cure 3/8" @ 50% RH & 77°F	57 - 63 hrs	57 - 63 hrs
Tensile Strength ASTM D412	50 - 100 psi	50 - 100 psi
Elongation ASTM D412	245 - 300%	245 - 300%
Hardness (Shore A) ASTM D2240	15 ± 5	15 ± 5
Specific Gravity	0.95 - 1.01	0.95 - 1.01
Dielectric Strength ASTM D149	17.5 kV/mm (446 V/mil)	-
Dielectric Constant (100Hz) ASTM D150	2.72	-
Dielectric Constant (100kHz) ASTM D150	2.70	-
Dissipation Factor (100Hz) ASTM D150	0.0034	-
Dissipation Factor (100kHz) ASTM D150	0.0021	-
Volume Resistivity ASTM D257	5.74 x 10 ¹² Ω-cm (20V) 2.92 x 10 ¹³ Ω-cm	-

Oxime-Cure Semi-Flowable Silicone 200-107

200-107 is a single-component, oxime-cure silicon for use in applications where the coating needs settle into small crevices and hard to reach area while maintaining consistency.

200-107 has a viscosity of 70,000 – 120,000 cPs, and skins over in less than 30 minutes. This semi-flowable silicone's gap-filling properties offer superior quality and long-term durability, particularly upon exposure to hostile environment conditions.

Applications include:

- Coating intricate electrical and mechanical devices
- Insulating electrical terminals
- Pin/solder joint coverage
- Thin section potting/encapsulation
- Sealing and bonding applications where low viscosity and self-leveling properties are required

Semi Self-Leveling Silicone-Free Hybrid

A single component, silicone-free, semi self-leveling hybrid sealant, 900-92x is designed for sealing roofing components and mechanically fixed joints, typically for vehicles like RVs and buses. It can also be used as a body-in-white sealant. 900-92x offers a controlled flow into joints and cracks to provide a durable protective seal while moving and flexing with the substrate. This hybrid is paintable after 1 hour.

Applications include:

Roof sealing of RVs, buses, trailers, and other road and off-road vehicles

NOVAGARD

200-107 90

900-92x

	Appearance	Fluid, white	Fluid, black, gray, white
one	Cure Chemistry	Oxime Silicone	Alkoxy Hybrid
as	Viscosity (cPs) Brookfield #7 @ 20 rpm Brookfield #7 @ 10 rpm	70,000-110,000 90,000-120,000	-
	Skin-Time 3/8" @ 50% RH & 77%	<30 min	10 - 25 min
ntal	Through Cure 3/8" @ 50% RH & 77°F	24 - 30 hrs	7 days
	Tensile Strength ASTM D412	200 psi	175 - 225 psi
	Elongation ASTM D412	250%	250 - 300%
-Y	Hardness (Shore A) ASTM D2240	25 ± 5	45 ± 5
	Adhesion ASTM C794 Glass Aluminum Wood PVC	>15 pli >15 pli _ _	13 pli 15 pli 15 pli 14 pli
	Specific Gravity	1.10 - 1.20	1.45 - 1.55
eling oofing cally	UV Exposure ASTM G154 (2,000 hours UV-A)	-	pass
d as			Preliminary data.

Preliminary data. Full commercial availability expected in 2024. Lab samples are currently available.

Protective Coatings & Sealants

900-212 200-252

Sprayable Silicone-Free Hybrid 900-212 **COMING SOON**

Our R&D scientists are currently developing a sprayable hybrid that adheres to both primed and unprimed surfaces. For use in automotive applications, this sprayable seam sealer will duplicate the look and function of OEM textured or swirled sealers, wheelhouse coatings, and sound dampening materials. This new paintable hybrid is expected to be commercially available in 2024. Ask your sales representative for more information or for sample materials.



Flowable Silicone Waterproofing Seam Sealer 200-252

200-252 is a single component, low viscosity, highly flowable silicone sealant. It easily flows into small spaces, providing a flexible, robust waterproofing of finished components. Maintains sufficient thixotropy so as to remain in place during cure (no drop-outs). Skins quickly to avoid mess, fully cured in 24 hours. Waterproof formula works well and maintains flexibility in extreme temperatures, filling voids and irregularities so that water can run off easily.

Applications include:

- Sealing and waterproofing stitched seams in outdoor products such as tents
- Sealing and waterproofing the seams of engineered fabric buildings and other semi-permanent structures

Appearance	Paste, black	Fluid, translucent
Cure Chemistry	Alkoxy Hybrid	Oxime Silicone
Viscosity (cPs) Brookfield #2 @ 10 rpm	-	8,000-12,000
Viscosity (cPs) ASTM D4440 IHz 5Hz 10Hz	838,000 187,500 97,000	-
Skin-Time 3/8" @ 50% RH & 77°F	<50 min	<20 min
Through Cure 3/8" @ 50% RH & 77°F	7 days	<24 hrs
Tensile Strength ASTM D412	-	30 - 50 psi
Elongation ASTM D412	-	80 - 120%
Hardness (Shore A) ASTM D2240	46	20 ± 5
Specific Gravity	1.2 - 1.3	0.95 - 1.01
Extrusion Rate ASTM C1183 @ 90 psi	500 - 1,000 g	-
Slump Boeing Jig ASTM D2202	<0.3"	-
Service Temp	<mark>-40°F to 392°F</mark> (-40°C to 200°C)	-

Preliminary data Full data set expected in 2024

Addition Cure Silicone (2-part sealant) 600-200/600-205

600-200 and 600-205 are two-component, addition-cure silicones that, when mixed, cure to a soft, self-adhering flexible gel. These materials are often used for deep section cure applications.

They offer exceptionally fast cure times, convenient mix ratios, are solvent free, and non-corrosive. These materials ship in separate containers that are labeled Part A and Part B. These products are mix ratio sensitive and require accurate metering (1 part A: 1 part B v/v).



600-200 (working time of <15 minutes, and a cure time of 2-3 hours after mixing) **600–205** (working time of 3 – 5 minutes after mixing)

Applications include:

- General potting and encapsulation
- Junction box enclosures
- Clam shell connectors
- Cable splice kits
- Waterproof connectors and sensors
- Electrical insulation
- Amplifiers and relays

	600–200 (Part A/Part B)	600-205 (Part A/Part B)
Appearance	Fluid, clear	Fluid, clear
Cure Chemistry	2-Component Platinum Silicone	2-Component Platinum Silicone
Viscosity (CPs) Brookfield #5 @ 20 rpm	2,000-4,000 2,000-4,000	3,000-5,000 3,000-5,000
Specific Gravity	0.95 - 1.05	0.95 - 1.05
Service Temp	−40°F to 400°F (-40°C to 204°C)	-40°F to 400°F (-40°C to 204°C)
Mix Ratio v/v	1:1	1:1
Working Time	<15 min	3 - 5 min
Penetration Novagard Test Method After cure, 7 days @ 25°C/50% RH	4.0 - 4.3 mm	4.0 - 5.0 mm
Pull Novagard Test Method After cure, 7 days @ 25°C/50% RH	3.5 - 4.75"	-

Greases & Lubricants

Silicone Greases

Lithium soap thickened greases to reduce friction and wear under loads, slow speeds, and variable environmental conditions.

G321

Ultra-low operatina temperature

Meets spec CID A-A-59173 Type II (formerly Mil-G-46886B) Temp: -99°F to 399°F (-73°C to 204°C)

G322L

Outstanding corrosion protection Temp: -67°F to 302°F (-55°C to 150°C)

G326 **Enhanced corrosion** protection Temp: -67°F to 302°F (-55°C to 150°C)

G330M **General purpose**

lubricant Temp: -67°F to 302°F (-55°C to 150°C)

G351

Oxidation and radiation resistant Meets spec Mil-L-15719A Temp: -99°F to 399°F (-73°C to 204°C)

General Purpose Dielectric Compounds

Silicones thickened with inorganic fillers provide lubrication and insulation, and are resistant to oxidation and thermal degradation.

G624

Superior dielectric strength Meets spec SAEAS-8660 (formerly Mil-S-8660C) Temp: -40°F to 401°F (-40°C to 205°C)

G635

Lower operating temperatures Temp: -71°F to 392°F (-57°C to 200°C)

G661

Seals and protects electrical connections above and below ground; excellent plastic and rubber lubricant Temp: -40°F to 401°F (-40°C to 205°C)

G662

Certified to NSF Standard 61 for drinking water system components Temp: -40°F to 401°F (-40°C to 205°C)

G687

Ideal for high voltage insulators to prevent flashover Temp: -40°F to 401°F (-40°C to 205°C)

G697

Inhibitor fights galvanic corrosion Meets spec Mil-C-21567C Temp: -67°F to 302°F (-55°C to 150°C)

Tough conditions need silicone-based lubricants. Silicone's unique properties work in extreme environments to offer a longer service life. Within a wide operating temperature range, these greases maintain consistency without smoking, melting, or charring. They are non-corrosive, chemically inert, and compatible with plastic and most organics.

Silicone greases may be wiped on, brushed on, dispensed from a grease gun, or applied by automated equipment. When dispensed in a non-polar solvent, they may be applied by brushing, spraying, or dip coating (caution is required when selecting solvents).

Thermally Conductive
Compounds

Non-curing materials offering excellent heat transfer in large and small electrical and electronic components. Our thermally conductive compounds provide cost effective thermal management in a wide variety of applications.

G641

Ideal for thermocouple wells, power diodes, transistors, semiconductors, and ballasts TC=0.7 W/mKTemp: -40°F to 401°F (-40°C to 205°C)

G644

A softer and lower viscosity version of G641 TC=0.7 W/mKTemp: -40°F to 401°F (-40°C to 205°C)

		G321	G322L	G326	G330M	G351	G624	G635	G661	G662	G687	G697	G641	G644
	offset	DC33 DC55				DC44	DC4	DC5	DC111	DC111	нv3099		DC340	DC340
	oxidation resistant	√	~	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	~	~	\checkmark	~	\checkmark
	water resistant	\checkmark	~	\checkmark	~	\checkmark	\checkmark	\checkmark						
ES	non-polar solvent soluble	\checkmark	\checkmark	\checkmark	\checkmark	~	\checkmark	\checkmark	\checkmark	\checkmark	~	\checkmark	\checkmark	\checkmark
ATTRIBUTES	dielectric	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	~	\checkmark	\checkmark	~	\checkmark		
ATTR	corrosion protection	\checkmark	~	\checkmark										
	galvanic corrosion inhibitors		\checkmark	\checkmark								\checkmark		
	vacuum resistant						\checkmark		\checkmark	~	~	\checkmark		
	radiation resistant	\checkmark				\checkmark								
	metal to metal	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark								
	aluminum lubrication		\checkmark	\checkmark	\checkmark									
	ball bearings	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark								
	roller & sleeve bearings		\checkmark	\checkmark	\checkmark									
	chassis lubrication		\checkmark	\checkmark	\checkmark		\checkmark		\checkmark					
	high temp chains/ gears/linkages		\checkmark	\checkmark	\checkmark									
	swivel joints		\checkmark	\checkmark	\checkmark									
SNC	light & medium loads	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark								
APPLICATIONS	low speed/movement	\checkmark	~	\checkmark	\checkmark	\checkmark								
PPLIC	thread protector						\checkmark		\checkmark	\checkmark	~	\checkmark		
A	metal to rubber/ metal to plastic	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	~	\checkmark		
	rubber to plastic				\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		
	low & high temp operation	\checkmark	~	\checkmark	\checkmark	\checkmark								
	electrical insulators & connectors						\checkmark	~	~		~			
	telecommunication connectors						\checkmark		\checkmark					
	relays & switches		\checkmark	\checkmark			\checkmark		\checkmark			\checkmark		
	conveyors & well drilling		\checkmark	\checkmark	\checkmark									

Clean up with non-polar solvents such as mineral spirits. They are soluble in Stoddard solvents, toluene, and xylene. Silicone greases are not suitable for use in contact with high concentrations of oxygen or highly oxidative materials. Contact with high pressure oxygen, ozone, peroxides, or fuming nitric acid can result in fire or explosion. Silicone materials are damaged by exposure to strong mineral acids (e.g. sulfuric, hydrochloric, nitric), strong alkaline solutions (e.g. sodium or potassium hydroxides), nitrates, or peroxides. Novagard silicone greases and compounds are not recommended for bearings with a D/N ratio exceeding 200,000. D/N ratio is calculated by multiplying the diameter (mm) times the bearing speed (rpm).



Best-in-Class R&D

Combine 35 years of silicone expertise with a \$30 million investment in research, facility, people, and processes, and innovative manufacturing solutions are sure to follow.

Formulated to succeed

Our scientists work best when armed with raw materials that meet our high standards and equipment that allows them to identify, analyze, quantify, and qualify. With 100+ variations of tests available that measure every aspect of a material, we will go to any length to assure that each innovative product we produce performs to your exacting specifications.

Aged to perfection

Even in a lab stocked with the newest, most advanced, intricate testing equipment, that trusty old oven is still a time tested favorite. We use it to subject our silicones to the harshest of environments in the shortest amount of time. We simulate the aging process to evaluate and assure the shelf life and long term performance of the materials you trust to protect your product.

Listen, learn, then innovate

All the best lab equipment being used by the smartest silicone engineers in the world won't make a difference unless there is absolute clarity as to what the silicone material needs to do, where is needs to do it, and why. And that's why any project must start with a meeting of the minds-yours and ours.









Clean and Green

Low odor, solvent free, no harmful VOC emissions or outgassing, no isocyanates, PFAS free - regardless of the industry, Novagard's products provide exceptional performance AND are eco-friendly. Helping you best meet your responsibilities to your customers, your co-workers, and our planet.

World Class Products

In addition to the products offered in this catalog, Novagard manufactures silicone sealants, coatings, and PVC foams for a wide variety of markets.

Building Systems Silicones & Hybrids

We manufacture a complete line of professional grade one-part, two-part, and hybrid silicone sealants designed to meet the needs of window, door, siding, and metal roof manufacturers, dealers, building material wholesalers, and contractors. Novagard silicone sealants and adhesives are permanently flexible, solvent-free, impervious to UV light, and adhere without primers to most common building substrates.

Within the OEM window manufacturing sector, our products meet or surpass all industry standards for window and door fabrication applications. Window and Door manufacturers trust our AAMA/FGIA-approved formulations for their high tensile strength, quick cure rates, and excellent adhesion to most substrates.

For the construction industry, we offer a complete line of sealants and mastics for roofing installations and maintenance. Our products are easily gunned at all temperatures, VOC compliant in all 50 states, and available in all major siding, trim coil, window, and metal roof manufacturer colors.

Electronics Grade Silicones

When a non-corrosive product is required, we offer unprimed adhesive solutions that provide excellent insulation properties, vibration damping, and barrier protection against weather and other intrusions in electronics applications. Novagard's electronics grade alkoxy sealants combine increased flexibility and high temperature resistance, allowing you more versatility in the design and assembly process. Our silicones reliably seal, bond, coat, gasket, and encapsulate to protect sensitive components and modules, increase the reliability, and extend the useful life of your product.

PVC Foam

We manufacture PVC foam in a variety of colors, densities, and dimensions to meet the ever-growing needs of our customers in the transportation, HVAC, appliance, automotive, and healthcare industries. Our foams cushion against shock and vibration, and its closed cell structure seals out light, air, dust, and moisture. Foam Seal foams are sulfur free, low VOC, and certified Prop 65 compliant.



Our **innovative** labs produce an **extensive** line of quality products.





Learn more about everything Novagard can do for you





NOVAGARD

Engineering high performance and sustainable solutions today for the needs and challenges of tomorrow.

We do so with respect for our people, our customers, our supplier partners, our community, and our environment.

Featured Products

	200-107	p23
	200-202	
	200-252	p24
	200-257	p22
	200-273	p17
	400-1xx	p6
	400-110	pll
	400-118	pll
	400-155	pll
	400-195	p8, 18
	400-196	p8
	400-202	p8
	400-590	p9
	400-900	p13, 19
	400-950	p13, 19
ł	500-09x	p7
	500-600	p9
	500-642	p12
	600-200	Concession of the local division of the loca
	600-205	p25
	800-220	p16
	800-400	p19
l	800-401	p19
	900-1xx	
		p24
		p10
	900-92x	p23

110



5109 Hamilton Avenue, Cleveland, OH 44114 USA (216) 881-8111 | (800) 380-0138 | (216) 881-6977 fax | novagard.com

ISO 9001:2015 QMS (with design), IATF 16949:2016 QMS (with design) | Certified Women's Business Enterprise