



We are an ISO 9001 Quality System...The Standard for World Class Quality



CATALOG ON CD: Our complete product catalog now available on a Glu Guru™ Catalog CD.....Available free to you. Call 1-800-323-5158 or

Email: gluguru@on-hand.com

for your Compact Disc and we will immediately mail it to you free of charge.

FREE Users Guide to Adhesives

Part 1 Assessment of Bonding

Part 2 Essential stages of the Pretreatment Process

Call 1-800-323-5158 or Email gluguru@on-hand.com

ADHESIVE FOCUS

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Fall 2003 Issue

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ADHESIVE FOCUS

Volume IX Issue 4

Fall 2003

ITW Plexus

Nothing speeds assembly like **PLEXUS** Adhesives!



ITW Devcon, manufacturers of PLEXUS Methacrylate Adhesives, reports that the methacrylate technology of today represents “a quantum leap over the past performance of the more traditional acrylic technology” and was developed to fill the shortcomings such as the brittleness, gap filling and less than reliable cures of the early acrylics

The PLEXUS structural methacrylate adhesives provide superior performance across a wide range of substrates including today’s most advanced, difficult to bond plastics

EASY TO MIX AND APPLY

Plexus two component adhesives are combined in a ratio of 1:1, allowing them to be mixed and dispensed using manual or less sophisticated non-metered dispensing equipment.

WIDE RANGE OF SUBSTRATES

Methacrylate adhesives are compatible with a wide range of substrates including: Stainless Steel, Epoxy Coated Surfaces, PVC, ABS, Aluminum, Styrenecs, Steel, Noryl, Azloy, Rynite, Valox, Lomod, RIM Urethane, SMC, Xenoy, Bexloy, Ceramics and Ferrites.



MARINE

AUTOMOTIVE

PLEXUS “Fiberglass Fusion” Adhesives
Are Revolutionizing Boatbuilding

PLEXUS “Fiberglass Fusion” Adhesives
Are Used by Major Vehicle Manufacturers Worldwide

GENERAL ASSEMBLY

TRUCK

The Glu Guru™’s Catalog of Adhesives can be seen on: www.gluguru.com



MARINE

PLEXUS "Fiberglass Fusion" Adhesives
Are Revolutionizing Boatbuilding



With the ability to produce durable, high-strength bonds to virtually all polyester resins and gelcoats, as well as most thermoplastics and metals, Plexus Adhesives are dramatically changing the way boats are designed and built. Joints that used to be built up through hours of tedious labor are now formed quickly and easily with Plexus "Fiberglass Fusion" Adhesives.

Chemically Fuse Composites

Unlike marine putties, Plexus Adhesives chemically fuse FRP and composites. They produce bonds so strong that the substrates will delaminate before the bond fails.

Superior Bond Strength and Resistance

Stringer and hull assemblies bonded with Plexus Adhesives offer superior strength, durability, flexibility, and impact resistance. They also have excellent resistance to chemicals, fuels, moisture, water, and UV.



Little or No Surface Preparation

Plexus Adhesives are primerless, require no sanding or grinding and virtually no surface preparation.



Reduce Assembly Costs

Because they eliminate surface preparation and cure rapidly at room temperature, Plexus Adhesives simplify and shorten assembly and reduce production costs. In fact, a typical stringer or liner can be bonded in as little as 20 minutes.



Lower VOC Emissions

Every pound of Plexus Adhesive used in place of marine putty can reduce VOC emissions by up to 90%



For product specifications

1-800-323-5158
gluguru@on-hand.com
www.gluguru.com

MARINE



Worker Friendly All Pneumatic System

Powered by shop air at 100 psi, FusionMate Dispensers have no electrical motors. Worker friendly, they are ideal for most composites bonding operations.

Independent Chain Drives for Adhesive and Activator Pumps

Independent chain drives for adhesive and activator pumps provide years of trouble-free service. Found only on FusionMate Adhesive Dispensing Systems, this unique design allows purging of adhesive or activator independently.

The Heavy-Duty Adhesive Dispensing for Plexus Adhesives!

Designed for Maximum Performance, and Minimum Downtime

With decades of research and hands-on experience, Plexus designed FusionMate™ Dispensers for the most demanding adhesive dispensing applications. FusionMate Dispensers are specifically optimized for Plexus methacrylate adhesives. Their heavy-duty design ensures years of consistent, reliable, trouble-free service. Since most components can be purchased off-the-shelf from industrial supply houses, any maintenance or repairs can be performed faster, more easily, and less expensively than on competitive machines.

Positive Displacement Pump Provides Precise, Continuous Metering

The FusionMate's gerotor pump provides continuous positive displacement pumping for accurate volume ratios from 6:1 to 15:1. The output is adjustable for flow rates from 0.1 to 1.3 gpm.



Adhesive and Activator Gerotors (cover removed)



Dispensing Guns



Hydraulic Tank



Hydraulic Power head



Adhesive Ram Controls



ITW Plexus Product Guide

Product	Description and Potential Substrates	Color	Mix Ratio by Vol	Viscosity cP	Working Time min	Fixture Time min	Tensile Strength psi	Tensile Elongation %	Shear Strength psi
MA300	All Purpose Adhesive High Strength	Cream	1:1	A: 40-60,000 B: 40-60,000	4-6	12-15	3000-3500	15-25	3000-3500
MA310	Use with "Difficult to Bond" Plastics. High Strength	Cream	1:1	A: 40-60,000 B: 40-60,000	15-18	30-35	4000-4500	5-15	3000-3500
MA320	Excellent Low Temp and toughness properties	Off white White or black	10:1	A 135-175,000 B: 40-60,000	8-12	25-30	2000-2500	100-140	1500-2000
MA330	Pigmented MA 310. Use with "Difficult to Bond" Plastics	Gray	1:1	A:40-60,000	15-18	30-35	4000-4500	5-15	3000-3500
MA350	Low viscosity adhesive, High Strength especially suited for Battery Case Applications.	Black	2:1	A:14-2000 B: 15-1800	30-35	60-65	4500-5000	5-10	2000-2500
AO420	All Purpose Adhesive High Toughness	Blue Black or Yellow	10:1	A 100-125,000 B: 50-70,000	4-6	15-18	2700-3000	100-125	1750-2250
MA420FS	All Purpose Adhesive Very Fast Curing	Off-white	10:1	A:80-100,000 B: 50-80,000	1-2	3-4	1250-1500	5-15	1300-1600
MA422	All Purpose Adhesive Medium Open Time	Blue	10:1	A:100-125,000 B: 10-20,000	17-24	35-40	2000-2500	75-100	1500-1800
MA425	All Purpose Adhesive Long Open Time	Blue	10:1	A:100-125,000 B: 10-20,000	30-35	80-90	2000-2500	120-140	1500-1800
MA550	Excellent Marine Adhesive White, UV Stable	White	10:1	A:130-160,000	40-45	70-75	1750-2000	35-45	1300-1800
MA555	Low Exotherm Adhesive Able to be used 1" thick	Blue or White	10:1	A:115-130,000 B: 10-20,000	40-45	110-12-0	2500-3000	140-160	1250-1500
MA556	Standard for Structural Bonding in the Marine Industry	Off white Blue	10:1	A:180-220,000 B: 40-60,000	40-45	110-12-0	2500-3000	140-160	1250-1500
MA557	Long working time, non sagging, excellent gap filling up to 1 1/2"	Off white Blue	10:1	A:180-220,000 B: 40-60,000	90 min@ 77F	700 psi 3 hours 77F	2000-2500	120-160	1250-1550

Product	Description and Potential Substrates	Color	Mix Ratio by Vol	Viscosity cP	Working Time min	Fixture Time min	Tensile Strength psi	Tensile Elongation %	Shear Strength psi
MA590	All Purpose, long open time, and bonds lines up to 1 1/2" thick	Black	1:1	A:180-220,000 B:180-220,000	85-95	180-200	2500-3000	150-180	1600-2000
MA820	Excellent structural bonding of surface metal without surface prep	Off white Black	10:1	A:100-125,000	4-6	15-20	2600-3100	75-100	2000-2500
MA821	Designed for structural bonding of metals without primers	Off white Gray	10:1	A:80-110,000 B: 50-70,000	4-6	28-32	2300-2800	75-100	1800-2200
MA822	Designed for structural bonding of metals without primers	Off white Gray	10:1	A: 80-110,000 B: 50-70,000	15-20	35-40	3500-3800	90-110	2200-2700
MA920	Low Odor, All Purpose, Short Open Time	Blue	10:1	A:100-125,000 B: 40-60,000	4-6	15-20	2800-3100	75-100	2000-2500
MA922	Low Odor, All Purpose, Medium Open Time	Blue	10:1	A 100-125,000 B:10-20,000	17-24	35-40	1800-220-0	75-100	1400-1700
MA925	Low Odor, All Purpose, Long OpenTime	Blue	10:1	A 100-125,000 B:10-20,000	30-35	80-90	1750-2200	100-120	1400-1700
MA1020	Low Shrinkage, Low Odor All Purpose	Blue	10:1	A:100-125,000 B: 50-70,000	4-6	15-20	1750-2000	90-110	1250-1600
MA1021	All Purpose Adhesive Low Shrinkage Purpose	Off white Blue	10:1	A:100-125,000 B: 50-70,000	4-6	15-20	2000-2500	80-100	1750-2250
MA1023	All Purpose Adhesive Low Shrinkage Purpose	Off white Blue	10:1	A:100-125,000 B: 50-70,000	7-8	20-25	1750-2000	100-125	1400-1600
MA1025	Low Shrinkage, LowOdor. Able to use 1" thick	Blue	10:1	A:100-125,000 B: 10-20,000	20-25	40-45	1750-2000	90-110	1250-1600
MA3940	Use with Craze Sensitive Plastics	Off white	10:1	A 135-175000 B: 40-60,000	12-15	25-30	2000-2500	125-175	1500-2000

FOR TECHNICAL DATA SHEETS AND MATERIAL SAFETY DATA SHEETS
Call 1-800-323-5158 Email gluguru@on-hand.com

GENERAL ASSEMBLY Nothing speeds assembly like **PLEXUS** Adhesives

Plexus Adhesives are used in a wide range of general assembly applications. They:

- Bond plastics, composites, metals and dissimilar substrates
- Produce bonds so strong that they can be used in place of mechanical fasteners
- Require little or no surface preparation or primers
- Reduce the need for chlorinated solvents
- Are easily dispensed using hand-held dispensers or meter-mix equipment
- Are mixed as dispensed, eliminating premixing and pot life considerations
- Cure rapidly at room temperature without heating UV
- Offer excellent flexibility and resistance to impact, fuel, and chemicals



New Adhesive Bonds/Hermetically Seals Plastic and Composite Assemblies

Plexus MA350 is a two-part methacrylate structural adhesive formulated to bond most engineering thermoplastics and composites including ABS, PVC, Xenoy®, and certain grades of Noryl®. Designed to meet the needs of the rapidly evolving energy storage device market, Plexus MA350 is ideal for permanent bonding of plastic and composite assemblies, such as battery cases, that require long-term resistance to acidic solutions. It cures rapidly at room temperature and typically has a tensile shear strength of about 800 psi on grit blasted steel and compression shear strength of 1000 psi on Nylon 6,6. (It is not suitable for bonding polyethylene or polypropylene.)

Black in color, Plexus MA350 can be mixed in 1:1 and 2:1 ratios, can be readily dispensed with standard metering equipment utilizing stainless steel wetted components, and has a self-leveling viscosity. Once mixed, it has an open time of 20-35 minutes and reaches handling strength in 55-65



New Low-Odor Methacrylate Adhesives

New Plexus 900 Series low-odor adhesives are ideal for bonding engineered thermoplastics, composites, FRP, metals, and dissimilar materials. They provide the unmatched convenience, ease-of-use, and performance of standard Plexus Adhesives with 90% less odor. Plexus Adhesives, like all acrylate-based adhesives, have a distinctive odor which is completely safe, but which some people find unpleasant. Plexus Adhesives have been widely used in the automotive and marine industries for over 15 years, and workers in these industries are accustomed to the smell. However, as the use of the adhesives expands into global markets, odor has become more of a concern. The perception of odors is highly subjective - what some people like, others find bothersome. Similarly, Plexus has found the characteristic odor of methacrylate adhesives to be more troubling in some countries than in others. This new line makes working with Plexus Adhesives more agreeable in those countries, or environments, where odor is a concern.

FOR PRODUCT SPECIFICATIONS 1-800-323-5158

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gluguru.com

AUTOMOTIVE **PLEXUS** Adhesives Are Used by Major Vehicle Manufacturers Worldwide

Meet or Exceed Plastics Manufacturers Regrind Requirements

Plexus Adhesives are fully regrind compatible. Most thermoplastic parts bonded with these adhesives can be recycled without the labor-intensive step of cutting out the adhesive joints beforehand. In addition, the compatibility of Plexus Adhesives with many types of thermoplastic regrind reduces concern when separating plastic types. Plexus Adhesives are so similar in chemistry to certain regrind thermoplastics that they have only minimal influence on injection molding parameters and plastics properties. In fact, thousands of automobile bumpers bonded with Plexus Adhesives have already been recycled



Provide Design Freedom, Reduce Weight, and Improve Quality

The superior bond properties and performance of Plexus Adhesives free design engineers from the problems of bonding with conventional adhesives or mechanical fasteners. As a result, they allow vehicle manufacturers to design and produce superior quality products-products that look better, perform better, last longer, and cost less. By allowing manufacturers to bond new materials and composites, Plexus Adhesives also help reduce the weight and simplify assembly of many of today's automobiles.

TRUCK Nothing takes the grind out of truck production like **PLEXUS** Adhesives



No Grinding or Surface Preparation Plexus Adhesives bond engineered plastics, SMC, FRP, metals, and dissimilar substrates without grinding, surface preparation, or primers. As a result, they eliminate time-consuming and costly operations, lessen process variability, minimize dust, and greatly reduce the problems associated with toxic solvents.

Rapid Room Temperature Cure Plexus Adhesives cure very rapidly at room temperature, eliminating the need for costly, cumbersome heated clamping fixtures. They produce exceptionally strong bonds with superior flexibility, impact strength, and resistance to fuels, chemicals, UV, temperature extremes, and cyclic loading.

Environmentally Friendly Plexus Adhesives not only eliminate the need for harsh solvents, they have virtually no VOCs and can be recycled without cutting adhesive joints away from parts. They are approved for use by major vehicle manufacturers worldwide.

OTHER VEHICLES Nothing bonds engineered plastics and advanced composites like **PLEXUS** Adhesives!



They are approved for use by major vehicle manufacturers worldwide.

Unlike other adhesives and putties, Plexus "Fiberglass Fusion" Adhesives chemically fuse FRP, composites, and almost all polyester resins and gelcoats. Because they require virtually no surface preparation, Plexus Adhesives reduce assembly times by up to 60%. They produce bonds so strong that the substrates will delaminate before the bonds fail. Tough and durable,

Streamline Designs The superior bond properties and performance of Plexus Adhesives free design engineers from the problems of bonding with conventional adhesives. They allow manufacturers to design and produce superior quality vehicles-ones that look better, perform better, last longer, and cost less.

Reduced Weight Plexus Adhesives bond dissimilar materials which help to reduce weight and increase performance without sacrificing strength or rigidity.

Environmentally Friendly Plexus Adhesives not only eliminate the need for harsh solvents, they have virtually no VOC's and can be recycled without cutting adhesive joints away from parts.