



1. DESCRIPTION

Nitro Oneshot Adhesives are a two-part methacrylate, ultra violet light stable, non-yellowing surfacing adhesive designed for the seamless bonding of solid surface (acrylic and polyester and blends), engineered stone, and natural stone products. Combined at a ratio of 10:1 (10 parts resin, one part activator), Nitro Oneshot adhesives have a working time of 8-12 minutes and achieve nearly 90 percent of its ultimate strength in 18-22 minutes at room temperature curing. Nitro Oneshot Adhesives offer a unique hybrid rheology in that it has flow-ability, with dripless features allowing for vertical applications without running and dripping like many traditional seaming adhesives. In addition, the dripless characteristics help the product to stay where it is put. With the flow-ability, the glue can move well into miter fold seaming applications, wetting out perfectly. Nitro Oneshot offers high strength and toughness for Granite, quartz, porcelain, ceramic, sintered or ultra-compact stone, polyester, acrylic surfaces and more. Nitro Oneshot adhesives also offer thermal formability for solid surface.

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2. CHARACTERISTICS:

Room Temperature Cure Properties

- Working Time 8 to 12 minutes
- Fixture Time 18 to 22 minutes
- Routable 22 to 25 minutes
- Operating Temp. 65°F to 85°F (18°C to 30°C)
- Gap Filling .125 inches – 5 mils (thousands) for countertops
- Mixed Density 8.6 lbs/gal (.98 g/cc)
- Flash Point 51°F (11°C) – See MSDS for more safety information

3. CHEMICAL RESISTANCE:

- Excellent Resistance to:** **Susceptible to:**
- Hydrocarbons Polar Solvents
 - Acids and Bases Super Strong Acids and Bases
 - Vinegar
 - Wine and Condiments
 - Most Household Foods

4. PHYSICAL PROPERTIES:

Uncured:	Adhesive	Activator
• Viscosity(cps)	160,000 – 60,000	35,000 – 20,000
• Color	Clear/Various Colors	Clear
• Density (lbs/gal)	8.4	9.0
• Mix Ratio (wt or vol)	10.0	1.0
• Mixer Recommendation	Cartridge (50ml): Cartridge (250ml): Cartridge (500ml):	MBHX-0516T– Sulzer 16 element MFQX-0824 – Sulzer Quadro or MFQX 0724 -- Sulzer Quadro MFQX-0824 – Sulzer Quadro or MFQX 0724 -- Sulzer Quadro



5. MECHANICAL PROPERTIES:

Tensile Strength (ASTM D638)	Substrate	Results	Failure Type
<ul style="list-style-type: none">• Strength, psi	Acrylic Solid Surface	3,500 - 5,000	Cohesive/Substrate
<ul style="list-style-type: none">• Strength, psi	Polyester Solid Surface	3,500 - 4,500	Cohesive/Substrate

6. HANDLING AND APPLICATION:

NITRO Oneshot adhesive (Part A) and activator (Part B) are flammable. Contents include Methacrylate ester and acids, and peroxide. Keep containers closed after use. Wear gloves and safety glasses to avoid skin and eye contact. Wash with soap and water after skin contact. In case of eye contact, flush with water for 15 minutes and get medical attention. Harmful if swallowed. Keep out of the reach of children. Keep away from heat, sparks, and open flames. Do not smoke cigarettes or anything else while handling or near the product. Refer to the Nitro Oneshot Material Safety Data Sheet for more complete safety instruction. To assure maximum bond strength, surfaces must be mated together within the specified working time, and all clamps affixed within that time. Use sufficient material to ensure that the joint is completely filled when parts are mated and clamped. Avoid over clamping parts, which may cause a dry joint or a joint starved of adhesive. All adhesive application, part positioning, fixturing, and clamping should occur before the working time of the adhesive has expired. After the indicated working time, parts must remain undisturbed until the fixture time is completed. Sheet, adhesive, and shop temperature can have a significant effect on the work and fixture time of the adhesive. Application of Nitro Oneshot adhesive at temperatures between 65°F and 85°F (18°C and 30°C) will ensure proper cure. Temperatures below 65°F (18°C) will slow cure and fixture speed. Nitro Oneshot adhesives will still react, but will take longer. Temperatures above 85°F (18°C and 30°C) will increase cure and fixture speeds, and there's a risk that the adhesive will be hardened or too thick to pull a tight seam. The viscosities of Nitro Oneshot adhesives are affected by temperature.

NOTE: Because of the rapid curing features of Nitro Oneshot adhesives, large amounts of heat are generated when large masses of material are mixed at one time. The heat generated by the exothermic reaction resulting from mixing large amounts of adhesive can result in a boiling of the monomer in the adhesive (methyl methacrylate), resulting in the release of trapped air, steam and volatile gasses. To prevent this, use only enough material as needed for use within the working time for the product, and confine the gap or spread out the material to no more than .125 inches.

7. HANDLING AND STORAGE

The shelf life of Nitro Oneshot is one (1) years from the date of manufacture based upon continuous storage at room temperature (77°F or 25°C). Storage of Nitro Oneshot in refrigerated compartments will extend the shelf life even more. Do not store Nitro Oneshot or any other adhesives in a refrigerator which has food or lunch products in them. Be sure to bring Nitro Oneshot adhesives to room temperature before use, otherwise longer cure and fixture times may be expected. Long-term storage at temperatures above room temperature will shorten the shelf life of Nitro Oneshot adhesives, especially the activity of the catalyst. Storage at temperatures above 100°F or 38°C could shorten the shelf life to less than one month. Nitro Oneshot adhesives do not freeze in sub-zero temperatures. If Nitro Oneshot adhesives are left in subzero temperatures (i.e. in a truck overnight(s) during wintertime, allow adhesive to return to room temperature before use. While Nitro Oneshot adhesives can survive freezing temperatures, it is not advised to store them that way.

8. ADDITIONAL INFORMATION

NOTE: All information on this data sheet is based upon laboratory testing and is not intended for design purposes. GranQuartz/Nitro Oneshot makes no representations or warranties of any kind concerning this data. Due to the variance of storage, handling, and application of these materials, GranQuartz/Nitro Oneshot cannot accept liability for results obtained. Contact Nitro Oneshot for more information at: 1- **800-458-6222**.
