

ISO 9001:2000 2/14/05

TECHNICAL SALES BULLETIN

NORTH AMERICA'S PREMIERTM ADHESIVE/SEALANT

North America's Premier Adhesive/Sealant is an exceptional one-part product that combines ease of application, versatility of use, high ultimate strength, permanent bonds and long service life. N.A.P. Adhesive/Sealant is a high quality, high solids elastomeric sealant that provides superior adhesion to a variety of surfaces. Bond strength improves with age.

DESIGNED TO BOND:

- 1. All kinds of metal, including galvanized
- 2. Wood, particle board and plywood
- 3. Rubber, concrete, masonry and glass
- 4. Thermoplastics, such as ABS, styrene and polyolefins
- 5. Thermoset plastics like phenolic, polyurethane, polyesters and epoxies
- 6. Fiberglass and other fiber reinforced plastics

PHYSICAL CHARACTERISTICS:

- 1. Extrusion or trowellable grades
- 2. Fast drying tack free in less than one hour
- 3. Excellent early strength, gets stronger with age
- 4. High strength bonds to most materials (see Page 2)
- Permanently resilient resists vibration and stress caused by temperature cycling
- Outstanding resistance to water, oils and greases, fuels, industrial chemicals, acids and bases
- 7. Resists cracking, chipping and peeling
- 8. Requires no mixing, priming or heating
- 9. Comes in several colors and is paintable
- 10. Exceptional weatherability
- 11. Forms a tight, long-lasting seal to most surfaces
- 12. Shelf life: 7 months at temperatures not to exceed 80° F

TYPICAL PROPERTIES:

(Specification ranges available upon request.)
Base: Polychloroprene

Colors: Gray, white, off-white, aluminum, black,

school bus yellow

Solvent: Toluene Solids: 50%

PREPARATION OF SUBSTRATES:

Surfaces to be bonded should be cleaned of all dust, oils or other contaminates. A solvent wipe is often adequate. Bonds to rigid surfaces are usually improved by a solvent wipe followed with light abrasion (180 grit), and solvent wiping to remove abrasive residue. Dry surfaces

thoroughly before applying adhesive.

METHOD OF APPLICATION:

N.A.P. Adhesive/Sealant can be applied by ordinary caulking guns or pressure pumping equipment. Pumping equipment should be of the follower-plate type and have a pump ratio of at least 40:1. Aro, Binks, DeVilbiss, Graco and Lincoln all produce suitable equipment for handling this material.

Apply a bead of N.A.P. Adhesive/Sealant to one surface at temperatures above 40° F. When used as a sealant, the applied bead will shrink approximately 50%, so no tooling is necessary for most applications. The bead surface will be tack free in 15 - 45 minutes, depending on ambient conditions. Initial set time is 4 hours, after which parts may be handled.

When used as an adhesive between two non-porous surfaces, solvent must escape through the edges of the bond line. Clamping, taping or use of mechanical fasteners to hold parts in place until Adhesive/Sealant develops strength is recommended. After 24 hours at room temperature, the product is considered self-holding. The use of a heat lamp at 150° F for 1 hour will speed solvent evaporation and accelerate strength build-up. An alternative technique is to apply product to one surface, press the two surfaces to be bonded together to ensure adhesive transfer, separate parts and allow to air dry 10 - 20 minutes, then press back together with good pressure.

Weight/gallon: 9.2 pounds Specific Gravity: 1.1

Temperature Range: -60° F to 250° F Viscosity: Paste extrusion grade

N.A.P. Adhesive/Sealant is formulated for room temperature curing, and curing is initiated when a majority of the solvent has been evacuated from the bond line. Strength build-up is very fast in the early stages to give high holding power, with continued strength build-up over time.

Lower solids and viscosity grades of N.A.P. Adhesive/Sealant are available for alternative applications where better flow characteristics are required. These versions of the product are suitable for trowelling or brushing, and can be pumped through lower power equipment, including Plews guns.

CLEANER AND THINNER:

Toluene

Royal Adhesives & Sealants, LLC • 2001 W. Washington Street, South Bend, IN 46628 • Phone: 800-999-GLUE • Fax: 574-246-5425

PRECAUTIONARY DATA:

This product is extremely flammable. Vapors may form an explosive mixture with air. Precautions should be taken to keep product away from fire, sparks, motors and other sources of heat or flame. Turn off or deactivate any electrical equipment or sources of ignition. Adequate ventilation is required to keep vapor concentrations below the Threshold Limit Value.

- · For professional or industrial use only
- Read the container label and the Material Safety Data Sheet carefully before use
- · Keep away from children
- · Keep container closed when not in use
- · Store closed container under 80° F
- This product contains toxic chemicals subject to the Emergency Planning and Community Right-to-Know Act of 1986 and 40CFR 372.

DISPOSAL INFORMATION:

When discarded, this material is hazardous waste. Do no reuse container or remove label. Safely dispose of container and contents in accordance with applicable Federal, State and Local regulations.

TYPICAL PROPERTIES:

UV rating	No effect, 3000 hours with intermittent water spray every 30 minutes. ASTM 42
Flammability rating	Dried film meets MVSS 66
Slump resistance	Good
Creep resistance	Excellent
Ozone resistance	Excellent
Elongation	500%
RES hardness	65 - 14 day cure

TYPICAL LAP SHEAR STRENGTHS:

Aluminum to aluminum	416 psi
Azdel to Azdel	200 psi
Azdel to steel	200 psi
Fiberglass to fiberglass	540 psi
Aluminum to fiberglass	475 psi
Plywood to plywood	453 psi
Plywood to fiberglass	475 psi
Galvanized steel to galvanized steel	415 psi