





## **SEMI TRAILERS**

Seal Exterior Frame & Corner Caps Roofing Sealants Bonding Roof Bows Bonding Sidewalls Seal Exterior / Interior Seams Bonding FRP Wall Panels



## **TOWABLE TRAILERS**

Roofing Sealants
Sealing Vents / Roof Penetrations
Bonding Roof Bows
Sealing Windows & Door Frames
Bonding Sidewalls
Vinyl Rubber Flooring Adhesives
Sealing Fenders



# **RECREATIONAL VEHICLES**

Bonding Roof Bows
Bonding Headliners
Bonding Interior Wall Panels
Bonding Sidewall
Laminating HPL Cabinet Surfaces
Sealing Windows & Door Frames
Vinyl & Rubber Flooring Adhesives



## **EMERGENCY VEHICLES**

Bonding Headliners Bonding Interior Wall Panels Laminating HPL Cabinet Surfaces Roofing Sealants Sealing Windows and Door Frames Bonding Trim Pieces Vinyl & Rubber Flooring Adhesives



# **SCHOOL VEHICLES**

Bonding Headliners Bonding Interior Wall Panels Vinyl & Rubber Flooring Adhesives Roofing Sealants



PRODUCTS  Solidbond"	<b>SOLIDSEAL™</b> (NON-SAG) <b>Silappene:</b> Polyurethane adhesive/sealant	<b>SOLIDSEAL™Silapp•ene:</b> Polyurethane adhesive/sealant	<b>SOLIDSEAL" MS</b> Adhesive/sealant	NORTH AMERICA'S PREMIER™ Adhesive/sealant <i>≤siapp•ene</i>
	PULTURE I HANE AUHESIVE/SEALANT	PULTURE I HANE AUHESIVE/SEALANI	ADHESIVE/SEALANI	AUHESIVE/SEALANI —SIMPLIPANE
SOLIDBOND™ one component, high strength bonding adhesive with excellent sealant properties that provides a permanently elastic bond to most substrates. SOLIDBOND™ is a moisture cured, non sag system, specifically developed for the fabrication and repair of trailers, trucks, busses, trains, RV, utility bodies, van conversions & specialty vehicles.	SOLIDSEALTM is a one component, 96% solids, fast cure, flexible, silicone free, rubber based, dual purpose adhesive/sealant. It is a moisture cured, non sag system. SOLIDSEALTM provides a permanently elastic bond to most substrates without a primer.	SOLIDSEAL <sup>TM</sup> is a one component, 96% solids, fast cure, flexible, silicone free, rubber based, dual purpose adhesive/sealant. It is a moisture cured, non sag system. SOLIDSEAL <sup>TM</sup> provides a permanently elastic bond to most substrates.	SOLIDSEAL® MS is a one component, NON-YELLOWING, fast cure, high strength, industrial grade elastomeric adhesive/sealant. SOLIDSEAL® MS cures in the presence of atmospheric moisture to provide a permanently elastic bond to fasten materials, which have dissimilar coefficients of expansion. It combines the best qualities of polyurethane & silicone sealants.	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 & 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.
APPLICATION				
DESIGNED TO BOND:  1. Vehicle bodies & cab construction including panels, underbody components, roofing (metallic & FRP), front & rear spoilers, auto trim, moldings, body seams & welding joints  2. Waterproof lap seams & molding in truck trailers, RV's & autobody repair  3. Floor bonding, subfloor to metal cross members, butt joints & more  4. Bedding compound for exterior accessories as well as bonding trim & all kinds of stylings  5. A variety of general purpose joint sealing applications  6. Replacement of rivets & mechanical fasteners	DESIGNED TO BOND:  1. Various metals, including galvanized steel & aluminum  2. Wood, particle board and plywood  3. Glass, concrete, masonry & rubbers  4. Fiberglass & fiber reinforced plastics  5. Thermoset plastics such as polyurethane, polyester, epoxies  6. Thermoplastics, such as ABS, nylon, PVC  7. Skylight & porthole materials  8. Heating & air conditioning (HVAC) materials	DESIGNED TO BOND:  1. Various metals, including galvanized steel, stainless steel, cold rolled steel, & aluminum  2. Wood, particle board and plywood  3. Glass, concrete, masonry & rubbers  4. Fiberglass & fiber reinforced plastics  5. Thermoset plastics such as polyurethane, polyester, epoxies  6. Thermoplastics, such as ABS, nylon, PVC  7. Skylight & porthole materials  8. Heating & air conditioning (HVAC) materials	DESIGNED TO SEAL: SOLIDSEAL® MS has been specifically developed for sealing dynamically moving joints, such as: Expansion & control joints, precast concrete panel joints, tilt-up panel joints, curtain wall joints, perimeter caulking (windows, doors, panels) & metal roofs, sidewalls, FRP panels, etc. BASIC USES:  1. Waterproofing of lap seams in trucks & trailers 2. As a bedding compound for exterior accessories 3. Sealing of joints including body-to-cap, underside, roof joints & curtain wall joints 4. Perimeter sealing around windows & door openings, skylights, door hinges & air conditioners 5. General purpose joint sealing applications 6. Marine above & below the water line	DESIGNED TO BOND:  1. All kinds of metal, including galvanized 2. Wood, particle board & plywood 3. Rubber, concrete, masonry & glass 4. Thermoplastics, such as ABS, styrene & polyolefins 5. Thermoset plastics like phenolic, polyurethane, polyesters & epoxies 6. Fiberglass & other fiber reinforced plastics
FEATURES				
1. One component, ready to use, fast cure 2. Low VOC, odorless & particularly low volume shrinkage 3. Suitable for sidewall bonding applications. 4. Silicone free; sandable & paintable with most paints 5. UV stable, heat & moisture resistant 6. Broad adhesion spectrum to most substrates without a primer including: prepainted metals, plywood, glass, aluminum, steel, SMC, RIM FRP, Kemlite® & many plastics & composites 7. Non-staining	1. One component, ready to use, fast cure 2. Odorless & particularly low volume shrinkage 3. Suitable for Marine application - above & below water line 4. Silicone free; paintable with most paints 5. UV stable, heat & moisture resistant 6. Broad adhesion spectrum to most substrates without a primer 7. Non-staining characteristics on stone substrates 8. Formulated for superior non-sag characteristics	One component, ready to use, fast cure     Odorless & particularly low volume shrinkage     Suitable for Marine application - above     & below water line     Silicone free; paintable with most paints     UV stable, heat & moisture resistant     Broad adhesion spectrum to most     substrates     Non-staining characteristics on stone     substrates	Excellent adhesion to prepainted metals, plywood, glass, aluminum, steel, SMC, RIM, FRP, Luan, many plastics & composites     Fast Cure time with high bonding & adhesive strength capabilities     Paintable, sandable & remains permanently elastic     Has Excellent resistance to weathering & road salts, making it ideal for sealing dynamically moving joints     Is non-staining & non-yellowing     Contains no isocyanates	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 5. Permanently resilient - resists vibration & stress caused by temp. cycling 6. Excellent resist. to water, oils, greases, fuels, industrial chemicals, acids & bases 7. Resists cracking, chipping & peeling 8. Requires no mixing, priming or heating 9. Comes in several colors & is paintable 10. Exceptional weatherability 11. Forms a tight, long-lasting seal to most surface 12. Shelf life. 7 months at temp. not to exceed 80° F
TYPICAL PROPERTIES				
(Specification ranges available upon request)  Base: Polyurethane • Viscosity: Paste extrusion grade • Weight/gallon: 9.8 pounds • Specific Gravity: 1.17 • Temp. Range: -40° F to 200° F • Shelf Life: 12 months when stored in original unopened container under 80° F	(Specification ranges available upon request)  Base: Polyurethane • Viscosity: Paste extrusion grade • Weight/gallon: 9.8 pounds • Specific Gravity: 1.17 •  Temperature Range: -40° F to 200° F • Shelf Life: 6 months when stored in original unopened container under 80° F	(Specification ranges available upon request)  Base: Polyurethane • Viscosity: Paste extrusion grade • Weight/gallon: 9.8 pounds • Specific Gravity: 1.17 • Temperature Range: -40° F to 200° F • Shelf Life: 1 year	(Specification ranges available upon request)  Base: Polymer Silyl modified polyether •  Viscosity: Paste, extrusion grade • Solids: (90% to 100%) • Specific Gravity: 1.65 •  Temperature Range: (-40° F to 200° F) •  Shelf Life: 1 year	(Specification ranges available upon request) Base: Polychloroprene • Solvent: Toluene • Solids: 50% • Weight/gallon: 9.2 pounds • Specific Gravity: 1.1 • Temperature Range: -60° F to 250° F • Viscosity: Paste extrusion grade
TYPICAL PHYSICAL CHARACTERISTICS				
(Specification ranges available upon request) Tensile Strength after 30 days at room temp.: 475 psi • Ultimate Elongation after 30 days at room temp.: 350% • Shore A Hardness after 30 days at room temp.: 50 • Tack-free @ 77° F, 50% RH: 40 Min • Lap Shear: 400+ psi • UV Resistance: Very Good • Ozone, Creep & Sag Resistance: Excellent	(Specification ranges available upon request) Tensile Strength after 30 days at room temp.: 475 psi • Ultimate Elongation after 30 days at room temp.: 600% • Shore A Hardness after 30 days at room temp.: 35 • UV Resistance: Very Good • Ozone, & Creep Resistance: Excellent • Sag Resistance: Superior	(Specification ranges available upon request) Tensile Strength after 30 days at room temp.: 199 psi • Ultimate Elongation after 30 days at room temp.: 700% • Shore A Hardness after 30 days at room temp.: 50 • UV Resistance: Very Good • Ozone, Creep & Sag Resistance: Excellent	Slump, in: Nil • Tack-Free Time at 77° F, 50% RH: 90 min. • Skin Time at 77° F, 50% RH: 20 min • Durometer Hardness, Shore A: 45 • 100% Modulus, psi.: 200 • Ultimate Tensile Strength: 300 psi. • Elongation: 350% • Application Temperature: 40° F to 120° F • Service Temperature: -30° F to 200° F	UV Rating: No effect, 3000 hrs. 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
PACKAGING INFORMATION				
Part No. 12250 White, 12285 Black, 12286 Gray • 10.3 oz. • Cartridge/Sausage 10 oz. & 20 oz. • Sausage - 5 gal. & 55 gal Containers	Part No. 12608 White ● 10.3 oz. ● Cartridge/Sausage 10 oz. & 20 oz. ● Sausage - 5 gal. & 55 gal Containers	Part No. 12176 White, 12232 Black, 12154 Gray (custom colors available) • 10.3 oz. • Cartridge/Sausage 10 oz. & 20 oz. • Sausage - 5 gal. & 55 gal Containers	Part No. 13053 White ● 10.3 oz. ● Cartridge/Sausage 10 oz. & 20 oz. ● Sausage - 5 gal. & 55 gal Containers	Part No. 06324 Off White, 06325 Gray, 06326 Black, 06328 Super White, 06330 Aluminum • 10.3 oz. • Cartridge/Sausage 10 oz. & 20 oz. • Sausage - 5 gal. & 55 gal Containers

HYDRA FAST-EN WATER BASED ADHESIVE

Hydra

SILAPRENE\*

#### DESCRIPTION

Part No. 12243 White - wet, Clear - dry BOND-PLUS<sup>®</sup> is a water based emulsion adhesive for pressure sensitive application.

#### **DESIGNED TO BOND:**

- 1. Elastomeric floor covering 2. Painted surfaces, glass,
- Fabric, wood, leather, felt
   & composition materials
   Thermoplastic, such as
- ABS, styrene, & polyolefin's Thermoset plastic like phenolic, polyurethane, polyester and epoxies

Part No. 20790 Creamy Part No. 20760 White BOND-PLUS® Vinyl Acetate-Ethylene Adhesive is **White - wet** BOND-PLUS<sup>®</sup> is a a water based product for use in bonding PVC flooring to a plywood base. It is high solids and can be sprayed, contact adhesive for bonding rubber backed carpet to marine grade plywood. Application amounts vary according to substrates &

Stir thoroughly before use. Apply by brush, roll coater or spray in a uniform film. Coverage of 80-110 sq. ft. per gallon is recommended for most applications smoothness and porosity of the substrates and the be necessary on porous parts. Mate parts mediately after coating

Part No. DC 13674 Creamy White - wet BOND-PLUS® is a water-based adhesive for bonding EPDM and TPO membranes for use in RV Roofing and Flooring

## Part No. DC 12742 Light

SILAPRENE® is a light amber, solvent-based, general purpose adhesive that forms a tough, flexible bond to many substrates. Long open time if needed.

#### DESIGNED TO BOND:

- 1. PVC film, sheet & foam
- 2. Acrylic, polyurethane, ABS & other thermoplastics
- 3. Most thermoset plastics, such as epoxy, & phenolics
- 4. Metal, wood, ceramic, leather and concrete
- 5. Nitrile. Neoprene and other elastomer

Part No. DC 12880 Clear to **Light Amber** 

HAP's FREE, LOW VOC Contact Adhesive is a high quality, synthetic rubber general-purpose contact adhesive. It utilizes a Hazardous Air Pollutant-free solvent system. Can be used for bonding foam, plastics. carpet, FRP, wood, various metals and many elastomers. Not recommended for highly plasticized materials.

The adhesive should be applied in smooth even coats to both surfaces at a rate of at least 2 dry grams per square foot of bonding area. Porous materials, such as fabric, foam or wood may require two coats of adhesive. Join the surfaces when the adhesive is tacky to the touch but does not transfer to the finger. Adequate pressure must be applied to assure complete contact.

Part No. DC 12786 Amber HIGH TEMPERATURE RESISTANT HAPS FREE ADHESIVE A high quality high temperature resistant synthetic rubber contact adhesive designed for foam bonding. It utilizes a Hazardous Air Pollutant-free solvent system. Can be used for bonding a wide variety of substrates: foam, carpet, FRP, aluminum, wood, plastic, etc.

#### **FEATURES**

- viscosity 2. Good resistant to oils, solvents, and water
- High peel strength
   Resistant to plasticizer

- 6. Excellent resistance to creep 7. Shelf life: 6 months when stored between 60°F & 80° in

are generally around 8-10 wet mils. Substrates must be wet mated & allowed to

dry to develop sufficient

bond for subsequent handling. Strength development is rapid (1.5-3

strength develops within 24 hours. Bondline is water

resistant to plasticizer migration.

- viscosity 2. Good resistant to water & olasticizer migration
- 3. High solids 4. Rapid strength development
- 5. Wet mate application
- support combustion 2. Good general purpose adhesive
- heat & moisture
  4. Flexible to temperatures
- as low as -40°F.
  Good adhesion to metal &
  marine grade plywood
- . Good adhesive for bonding EPDM. TPO Fleece Back. & TPO membrane to RV Roof
- decking & flooring . Excellent resistance to heat & moisture
- as low as -40°F 5. Good adhesion to metal, plywood & concrete
- 1. Spray or brush grade 2. Highly resistant to oils,
- fuels and water 3. Resistant to plasticizer
- migration from vinyl films 4. Retains flexibility at low
- temperatures 5. Pre-coated parts can be
- solvent reactivated
- 6. Shelf life, 6 months at temperatures not to exceed 80°F
- 1. Long open tack time 2. Repositionable
- 3. Excellent temperature resistance
- 4. Low-pressure spray ability
- 5. High tack
- 6. Can be sprayed, brushed or rolled
- 7. Light colored & non-staining
- for light colored fabrics 8. Excellent general purpose adhesion
- 9. Resistant to humidity & water

- 1. Quick setting
- 2. Fast drying
- 3. Heat resistance up to 240°F 4. Low-pressure spray

#### TYPICAL PROPERTIES

(Specification ranges available upon request) Base: Acrylic • Solids: 56% • Solvents: Water • Viscosity: 4500 cps, RVF Brookfield #4 spindle, @ 10 RPM. • Weight/Gallon: 8.7 pounds • Specific Gravity: 1.04 • Temperature Range: -30°F to 220°F

(Specification ranges Base: VAE • pH Approx. 5.0 • Solvents: Water • Viscosity: 3000 cps, (spindle #3@20 rpm/73F) • Percent Solids: Approx. 73% • Density: Approx. 9.03 lbs./gal. • Shelf Life: 4 months from date of manufacture • Clean Up: Water when wet, cleaning solvents when dry

(Specification ranges available upon request)
Base: Synthetic Polymer Emulsion • Solids: 49% •
Solvents: Water •
Temperature Range: -40° to 200° F • Visocity: 5,500 cps • Approx. Weight: 8.7 lbs./gal • Cleaner: Water when wet, toluene when dry • Storage: Store in closed container under 80° F. Keep from freezing. • Shelf Life: 1 year when stored below 80°F in unopened containers

(Specification ranges available upon request) available upon request Base: Synthetic Polyme Emulsion • Solids: 44% • Solvents: Water • Temperature Range: -40° to 200°F • Viscosity: 12,500 • Approx. Weight: 8.4 lbs./gal. • Storage: Store in closed container under 80°F. Keep rom freezing • pH: 7 • Disposal Information: Do not reuse container or remove label. Safely dispose of container & contents in accordance with law

(Specification ranges available upon request) Base: Nitrile rubber . Solids: 27% • Solvents: Acetone • Viscosity: 900 cps, RVF Brookfield #2 spindle, @ 10 RPM • Weight/Gallon: 7.1 pounds . Specific Gravity: .85 • Temperature Range: -35°F to 350°F

(Specification ranges available upon request) Base: Synthetic Rubber • Solids: 35% • Solvents: Acetone, Heptane, Cyclohexane . Heat Resistance: 190-200°F • Viscosity: 200-400 cps (#2 @ 20 rpm) • Approx. Wt: 7.1 lbs./gal. • Open Tack Time: 10-15 Min. • Cleaner: Acetone • VOC Content: <400 g/l • HAPs Content: 0 Ibs/gal • 1" x 6" 180° peel: 18 pli (cotton duck/AL) • 1 sq. in. shear: 250 psi. (cotton duck to itself) . SAFT: 160°F • Storage: In closed container under 80°F • Shelf Life: 1 yr. when stored below 80°F in unopened containers

(Specification ranges available upon request) Base: Synthetic Rubber • Solids: 36% • Solvents: Acetone, Heptane, Cyclohexane . Heat Resistance (SAFT): 240°F • Viscosity: 300 cps (#2 @ 10 rpm) • Approx.Weight: 6.7 lbs./gal. • Open Tack Time: 10-15 Min. • Cleaner: Acetone • VOC: 455 g/l • HAPs Content: 0 lbs./gal. • Storage: In closed container under 80°F • Shelf Life: 1 vr. when stored below 80°F in unopened containers

#### PACKAGING INFO

5 Gallon Pail

5 Gallon Pail

5 Gallon Pail

5 Gallon Pail

5 Gallon Pail 55 Gallon Drum 275 Gallon Tote 5 Gallon Pail 55 Gallon Drum 275 Gallon Tote 5 Gallon Pail 55 Gallon Drum 275 Gallon Tote

# ONE TRUSTED NAME... NOW MANY SOLUTIONS

**Royal Adhesives & Sealants** is a manufacturer and marketer of high performance adhesives, sealants, encapsulants and specialty polymers. These high performance products are used in a variety of markets including aerospace and defense, automotive, recreational vehicle, bus, truck and trailer, marine, assembly, electrical/electronic, filter, printing, packaging and laminating, roofing and flooring.

We offer a broad spectrum of thermosetting epoxy, urethane, and methyl methacrylate structural adhesives, cyanoacrylate and anerobic adhesives, energy cured acrylate adhesives and coatings and rubber and acrylic based adhesives, sealants and polymers to meet the most demanding adhesive, sealant and coating applications.

The company offers a wide array of standard and custom-formulated systems and application solutions. They are available in totes, drums, pails, and value-added packaging such as meter-mix and dispense cartridges, foil-wrapped sausages, and single-use packets.

We have over 25,000 sq. ft. of R&D labs that are fully equipped with testing, analytical and scale up equipment.

Headquartered in South Bend, Indiana, Royal operates state-of-the-industry ISO 9001/2008 certified facilities in Indiana, South Carolina, Texas, New Jersey, New Hampshire, Kansas, and California.

### REACTIVE

**EPOXY / URETHANES / MMA'S** 





## **WATER BASE**

ACRYLIC / NATURAL RUBBER / SBR / SPECIALTY





## **SOLVENT BASE**

Silaprene

NEOPRENE / EPDM / SBR / NITRILE / URETHANE / SPECIALTY

