

# ITW SprayCore Product Guide

ITW SprayCore is a pioneer and leading manufacturer of innovative sprayable syntactic materials and sprayable surfacing materials that improve product quality while increasing manufacturing efficiencies and reducing emissions.

ITW SprayCore's products include award-winning patented **SprayCore®** and **AlphaCoat®** sprayable materials.

Our spirit of innovation and technology leadership is evident in the service we provide to a wide variety of markets and industries. In addition to increasing manufacturer efficiencies and savings, ITW SprayCore is committed to addressing environmental concerns such as reducing Volatile Organic Compound (VOC) emissions and meeting the EPA's Maximum Achievable Control Technology (MACT) standards. ITW SprayCore products are available in formulas that meet or exceed legal and environmental requirements.



## SprayCore®

### Build a Better Laminate with Sprayable Syntactic Materials

The SprayCore product line includes award-winning, sprayable barrier coats, coring materials, wood replacement, radius compounds, putties, tooling materials and other high-quality polyester and vinylester materials used to construct composite structures that are lighter and stronger than laminates built with other products.

#### Universal Material

This multi-functional, high heat distortion, sprayable syntactic is VOC compliant and used as a barrier coat, bulk print barrier, or core and wood replacement. With SprayCore Universal material, you will build lighter, stronger, more durable FRP products in less time at lower cost.

- Multiple uses help reduce overhead expenses, simplify ordering and reduce stocking requirements
- No need for several spray machines, each dedicated to a single step in the lamination process
- Minimizes cleanup and changeover times when a single sprayer is used for several different steps in the lamination process
- Rapid application and quick cure cycle make faster mold turnaround, decreasing labor costs

Universal product: 4000 HDT Universal

Winner of the National Marine Manufacturers Association  
2002 Innovation Award

#### Coring Materials

Use SprayCore Coring Materials to construct composite laminates that are stronger than laminates built with balsa, PVC foams and other coring materials. The VOC-compliant sprayable syntactic is a resin-based matrix filled with multi-sized, hollow microspheres. In addition to strength, SprayCore Coring Materials make FRP parts lighter, improve impact resistance, reduce manufacturing, finishing, warranty and labor costs.

- Improve cosmetics by stopping print from bulk laminate
- Excellent strength-to-weight ratio
- Use for open and closed molding applications
- Quick cure cycle with low exotherm makes faster mold turnaround and increases productivity
- Application by a single person to a controlled thickness up to 2"
- Will not rot like wood cores

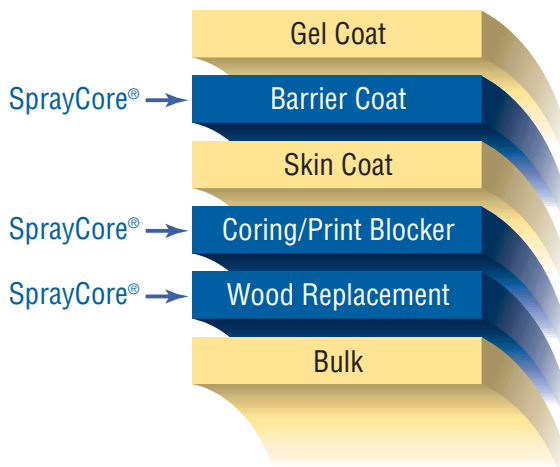
Coring Material products: 4000 HDT Universal, 2000-OS Core, 2000-OS LS Core, 6000-LS Core, 7315-LS Ceramic Core, 2045-LS Ceramic Core

## Barrier Coats

Use SprayCore® Barrier Coats to improve the cosmetic appearance and speed of production of FRP products. Developed with a hybrid vinylester, SprayCore Barrier Coats are applied directly behind the gel coat to provide an exceptional osmotic barrier and print barrier to the skin coat. SprayCore Barrier Coats help you cut costs for finishing, labor, manufacturing and warranty.

- High resistance to water permeation improves blister resistance
- Quick-curing formula boosts cosmetics by stopping print through from laminate skin coat
- Excellent flexural strength and fatigue resistance reduces impact cracks
- High strength/weight ratio plus adhesive properties mean reliable secondary bonding to gel and skin coat
- Spray-on application dramatically reduces or eliminates air entrapment behind the gel coat, reducing warranty cost
- Rapid application and quick cure cycle make faster mold turnaround, increasing throughput

**Barrier Coat products: 4000 HDT Universal, 1800-LS Barrier, 1500-LS Barrier, 3500-LS Ceramic Barrier**



*Laminate structure with SprayCore sprayable materials*

## Wood Replacement

As strong as or stronger than plywood and balsa wood, SprayCore Wood Replacement has no knots or flaws and will not rot. A high heat distortion, sprayable syntactic that is VOC compliant, SprayCore Wood Replacement helps you cut costs for labor and warranty, reduce manufacturing time and increase production throughput.

- High strength to weight ratio
- Excellent adhesive properties
- Better screw-holding capabilities than plywood
- High compression strength
- Low shrinkage upon curing offers better dimensional stability
- Formula makes parts stronger, lighter, improves impact resistance
- Spray-on application eliminates need for cutting room
- No leftover scrap pieces of plywood eliminates waste

**Wood Replacement product: 4000 HDT Universal**

## Radius Compounds

Use SprayCore Radius Compound to improve the cosmetic appearance and production speed of FRP products. Developed with a ceramic compound resin, the brushable or sprayable Radius Compound is most commonly used in tight radii and edges to prevent air voids between the gelcoat and the fiberglass laminate. SprayCore Radius Compound helps you increase production throughput by eliminating costly and time-consuming work in the final finish of your FRP products.

- Low viscosity, low filled, reactive compound
- Reduced glass print improves exterior gelcoat appearance
- No fiberglass spring back
- Eliminate heat lines commonly associated with resin-rich radii
- No gel chipping to repair, and no need for color match or patching

**Radius Compound products: 1050-LS Ceramic Radius Compound, 1060-LS Ceramic Radius Compound, 1070-LS Ceramic Radius Compound**

## Bedding Adhesives

SprayCore Bedding Adhesive is lightweight hand-troweled or sprayable adhesive putty for use with a variety of core products (plastic foams and wood products) common in the fiberglass industry. SprayCore Bedding Adhesive will not slide when the core material is embedded, allowing a more uniform bond with less void content.

- Comparable bond and shear strengths as chopped strand mat, but at half the weight
- Low shrink and low exotherm reduces print-through of the core materials
- High viscosity and high thixotropic index ensures there is no sag on vertical surfaces
- Longer gel time formula allows plenty of working time to apply the adhesive and embed the core material

**Bedding Adhesive products: 4000 HDT Universal, 7250 Bedding Adhesive, 7235 Bedding Adhesive**

## Polyester Adhesive Putties

Use SprayCore's strong, ultra-light or lightweight Polyester Adhesive Putty to bond fiberglass parts as well as fill strakes and tight radii. Primarily used in the marine industry and formulated for use in pails or with dispensable machines, this high output and uniformly catalyzed adhesive putty minimizes waste and ensures a consistent high strength bonded product, which will gel and cure evenly in both thick and thin cross sections. SprayCore Polyester Adhesive Putty helps increase production throughput and cut costs.

- Smooth creamy texture is less abrasive on equipment and spreads easily without tearing
- Low shrinkage and low exotherm allows for casting very thick cross sections without cracking
- High viscosity, thixotropic putty hangs well on vertical and inverted surfaces

- Formulated for slow or fast gel time targets

**Polyester Adhesive Putty products:** PDR 6000 Ultra-light Polyester Adhesive Putty, PDR 9000 Lightweight Polyester Adhesive Putty



*Sprayable application of SprayCore 2000-OS Coring Material*

### Transom Materials

Use SprayCore Transom Material to improve the speed of production, stability and strength of FRP products. Developed with a polymodal matrix of microspheres, the pourable or injectable VOC-compliant syntactic SprayCore Transom Material is lighter and stronger than most commonly used alternatives. SprayCore Transom Material helps cut costs for labor, manufacturing and warranty.

- No need to cut to shape, bond with chop or clamp in place; it saves time and money
- Faster production procedures
- Stronger and better than plywood and will never rot
- Superb bonding ability eliminates expensive repairs due to delaminations or blisters after demolding
- Low shrinkage upon curing provides better dimensional stability
- Eliminate delamination due to core material breakdown
- Excellent toughness, improving resistance to impact cracking

**Transom Material product:** 5000-LS Transom Material

### Plug Building

SprayCore Plug Building is a CNC machined, sprayable syntactic polyester excellent for manufacturing plugs because of low shrinkage. SprayCore Plug Building helps reduce manufacturing cost and prolong the life of tools.

- Rapid application and quick cure cycle allows faster plug turnaround, decreasing labor costs
- Developed for easy routing with CNC equipment
- Low shrinkage upon curing, providing better dimensional stability
- Consistent and void-free application with reliable thickness control
- Allows pulling more molds from each plug

- Composition produces only minimal heat extending the life of CNC machine cutting bits

**Plug Building product:** SprayCore Plug Building

### Tooling Materials

Use SprayCore Tooling Materials to enhance the cosmetic appearance, rigidity and speed of production of fiberglass reinforced molds. The ceramic compounded vinylester/polyester resin blend is applied behind the skin coat laminate and greatly reduces print-through of subsequent laminates onto the tooling gelcoat. SprayCore Tooling Material helps build stronger fiberglass reinforced molds faster and more economically.

- Rapid application, quick cure cycle and low shrinkage make faster mold turnaround, increasing throughput
- Spray-on application reduces air trapped behind the gelcoat and helps reduce transfer of the fiberglass pattern onto the tooling gelcoat
- Formula makes a rigid mold – no need to increase thickness through the addition of laminates – saving time and reducing glass fiber print
- Very high heat distortion temperature

**Tooling Material products:** 1055-LS Ceramic Tooling, 4055-LS Ceramic Tooling

### Laminating Resins

Use SprayCore Laminating Resins in conjunction with SprayCore Tooling Materials to enhance the rigidity and production speed of fiberglass reinforced molds. The sprayable or pourable low-shrink DCPD/vinylester laminating resin (also available with a fill) rapidly wets out the fiberglass reinforcement and cures uniformly with a low exotherm. SprayCore Laminating Resins help build stronger fiberglass reinforced molds faster and more economically.

- Allows more glass into the mold, increasing strength
- Formula provides for a rigid mold, resistant to heat and water, which prolongs life of mold
- Low shrinkage adds stability to mold-making
- Low exotherm improves product cosmetics

**Laminating Resin products:** 5155 Laminating Resin, VELR 4000 Laminating Resin, VEFL 4020 Filled Laminating Resin

**ITW SprayCore**

[www.itwspraycore.com](http://www.itwspraycore.com)



## Build a Class A Finish with Sprayable Surfacing Materials

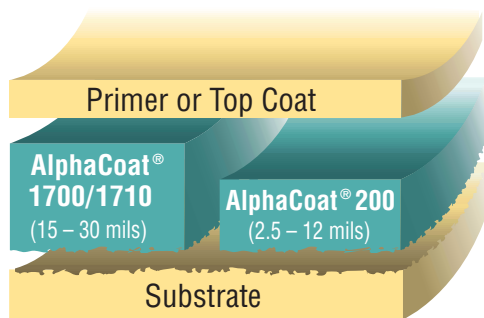
AlphaCoat product line includes patented, sprayable coatings developed for the industrial market and used for priming, filling and surfacing metal and other substrates, including cast iron, steel, aluminum, SMC, fiberglass, wood and concrete. AlphaCoat reduces the sanding, preparation time and labor required for a Class A finish.

### Fillers/Primers

Use AlphaCoat Fillers/Primers over iron, metal, aluminum, SMC, fiberglass and wood to fill most major pits, grind marks, casting flaws and surface imperfections serving as a base for a Class A finish. The patented, sprayable two-part polyester-based compound features very low VOCs. AlphaCoat Fillers/Primers eliminate multi-step finishing processes, improve cosmetic appearance and decrease production time.

- Extremely fast cure time speeds production
- Formula offers high-build capability and can be multiple coated without sanding or sealer for subsequent coating adhesion
- Fast sanding, without sandpaper clogging, reduces material cost
- Moisture and corrosion resistant

Fillers /Primers products: AlphaCoat 200, AlphaCoat 1700, AlphaCoat 1710



### Industrial Putty

Use AlphaFill® Industrial Putty over metal, galvanized metal, aluminum, fiberglass and wood to fill large voids serving as a base for a Class A finish. The polyester-based material is high quality, tack-free, lightweight and boasts excellent adhesion. AlphaFill Industrial Putty helps protect and improve cosmetics of various substrates while reducing preparation time and labor.

- Superior adhesion to corrosion-treated metals
- Vacuum processed – reduces pinholing and creates a creamy texture for smoother spreading
- Metal preparation does not require coarse grinding
- Clog-free formula for improved initial sanding reduces material cost
- Excellent featheredge adhesion eliminates peelback during sanding

Industrial Putty product: AlphaFill Lightweight Putty

### Spray Granite and Solid Surface

Use AlphaCoat Spray Granite to create custom countertops, sinks and other surfaces with the look of granite but without the cost. The high quality ISO sprayable polyester resin surfacing material is designed to give a granite appearance when filled with pigmented granules resulting in a dense, hard surface with excellent physical properties.

Use AlphaCoat® 800 Solid Surface in a vacuum transfer process to create custom countertops, sinks and other solid surfaces. The high quality polyester resin surfacing material will support any filler to achieve the desired cosmetic results.

AlphaCoat Spray Granite and Solid Surface are not pre-mixed, allowing you to create your own custom color and mix. They are highly repeatable and reduce inventory. You will save time and labor in achieving a superior solid surface or granite finish.

- Eliminate the need for gel coat and/or clear coat
- Exhibit superior particle suspension for long periods of time
- Excellent adhesion to a variety of substrates including wood, metal and concrete
- Resist staining, thermal shock, acids, bases and most solvents
- Rapid application and quick cure cycle help increase throughput

Spray Granite products: AlphaCoat 800, AlphaCoat 805

Solid Surface product: AlphaCoat 800 Solid Surface

### Cultured Marble

For a high-gloss finish that will not yellow, use AlphaCoat Cultured Marble as a clear coat or matrix. Just spray-on or pour the high quality polyester resin to the cultured marble mold first, then back-fill. It will work with any filler material you apply.

Cultured Marble products: AlphaCoat 800, AlphaCoat 805