Painting Fiberglass Sculpture or Fiberglass Animals with Nova Color Acrylic Paint

Nova Color is a brilliant, strong and durable paint for interior or exterior decorative fiberglass sculptures.

Proper surface preparation:
Proper surface preparation before you begin painting is the most important factor to insure a long lasting finish. The surface must be clean and free from silicone or oily residue. To remove silicone or oily residues wipe the surface with isopropyl alcohol.

If the sculpture is preprimed, lightly scrape the surface to check for good adhesion. Poor adhesion of the first paint layer can result in flaking or peeling. Lightly sand to roughen the surface and create a good surface for the paint to bond. Avoid creating fiberglass dust. Wear a appropriate dust mask respirator if you sand the fiberglass.

Fiberglass sculpture can be primed with Nova Color gesso. Do not prime with an oil-based primer unless the manufacturer of the primer specifies that it will accept water-based paints.

Adhesion Test Recommended:
To check adhesion, apply a test patch and allow to dry for 36 hours. Check by scraping.

Selecting Paint:
The paint must be suitable for exterior use. The type of acrylic resin used in paint formulation varies depending on the intended use of the paint. Some fine arts, schoolroom, craft or interior paint may use a good quality resin, but this resin may not be suitable for outdoor use. These paints may be too soft, weak or water sensitive for use outdoors. Nova Color Artists’ Acrylic Paint is made with a tough, 100% acrylic resin durable for outdoor use.

In addition to the type of resin used in the paint, the amount or percentage of resin used in the paint formula is important. As a rule, less expensive paints such as low cost house paints or craft paints have only the minimum amount of resin required to make them serviceable. House paints or craft paints are often made with a less expensive and less durable latex or vinyl-latex resin. House paints are designed to last 5-10 years before recoating. With age these paints may become thin, tend to wash off or appear chalky. If you wish to economize by using house paint, use the best quality paint containing 100% acrylic resin.

Adding too much water to the paint can affect adhesion and color permanence. In general, when adding water do not add more than 10% water to Nova Color or 5% to house paint. Use #235 Novaplex to thin the paint and keep film strength. If you have thinned the paint to use a paint sprayer, be sure you have applied a sufficiently thick paint film. Sealing with a topcoat will help if there are weak layers beneath.

Ideally, painting should be done in a temperature range of 65-85 degrees F. Avoid painting outdoors in misty or rainy weather. Painting should not be done late in the day if it may freeze before the paint dries. Do not paint on a frozen surface. Do not paint in hot, direct sunlight or on a heated surface, as paint may dry too fast. If you paint during poor weather conditions you may have adhesion problems in the future!

To minimize color fading due to sunlight you must be alert to the lightfastness rating of the pigment used in the paint. Some pigments fade more readily than others. The American Society for Testing and Materials (ASTM) standard D5098 rates the lightfastness of pigments. Lightfastness I is the highest rating.
Within the Lightfastness 1 rating some colors are more durable than others. The most durable lightfast colors for exterior conditions are:

#100 Burnt Sienna  #117 Raw Umber  #174 Neutral Gray 5
#101 Burnt Umber  #117D Raw Umber Dark  #175 Trans Yellow Iron Oxide
#104 Chromium Oxide Green  #118 Titanium White  #176 Indanthrone Blue
#105 Cobalt Blue  #119 Venetian Red (red oxide)  #177 Phthalo Green Yellow Shade
#108 Iron Oxide (Mars) Black  #121 Yellow Ochre  #180 Iridescent Base & Glaze
#109 Carbon Black  #128 Raw Sienna  #181 Quinacridone Violet
#110 Organic Pyrrole Orange  #133 Bismuth Yellow  #183 Bone/Ivory Black
#115 Phthalo Blue  #134 Raw Titanium Matte  #184 Deep Green
#115D Phthalo Blue Deep  #141 Mars Violet  #187 Pyrrole Red
#116 Phthalo Green  #149 Transparent Red Iron Oxide

These colors are not quite as highly rated as those listed above but can be good exterior choices:

#114 Alizarin Crimson Hue  #139 Super Pearl White  #148 Super Pearl Gold
#129 Quinacridone Red  #140 Payne’s Gray  #178 Arylide Yellow PY194
#137 Silver  #147 Quinacridone Magenta  #185 Sun Gold

Lightfastness ratings are according to the American Society for Testing and Materials D5098. I=Excellent   II=Very Good   III=Does not conform to ASTM D5098.

Ratings are based on the color at full strength. Most colors will be less lightfast when used as a tint (mixed with white, water or other colors) or if used as a glaze (mixed with clear mediums).

**Colors can fade or react to conditions other than sunlight.** Weathering and other environmental conditions such as moisture, acid rain, industrial gases, salt air, and wind can affect color permanence.

Cadmium colors (rated Lightfastness 1), especially cadmium yellows, are sensitive to damp conditions and are not recommended for exterior use. The addition of titanium dioxide (white paint) reduces the durability of cadmium pigments in outdoor environments. Cadmium oranges and reds are more light stable than cadmium yellows, but all cadmium pigments will degrade outdoors if moisture is allowed to penetrate through to the pigment. A clear coat can be used to protect the surface. Be sure that the edges and reverse side are sealed to prevent moisture penetration from those areas. In some situations, cadmium colors have been used successfully outdoors.

**Final Topcoat**  
A clear topcoat designed for exterior use such as Nova Color #216 Exterior Varnish or Nova Color #206 Gloss Medium & Varnish will help protect against dampness and add an extra layer of protection against wear and tear. **The topcoat should be applied with the same care as the sculpture painting.** A sloppy application of a topcoat can cause cloudiness. Apply the topcoat in thin layers, being careful not to overwork the topcoat while it is drying. Do not allow excess topcoat to collect in drips or crevices. Quickly brush out any drips or puddles before they dry. Using a paint roller is not recommended.

Nova Color #206 Gloss Medium & Varnish or #216 Exterior Varnish will resist moderate handling and wear and tear. Tougher finishes in urethane or polyurethane are available and you may want to consider them for playground equipment or amusement park ride carts. Some urethane and polyurethane coatings or finishes tend to yellow and are more brittle than Nova Color varnishes. Check the manufacturer’s label for details on use. Make a separate test panel for compatibility with urethane or polyurethane finishes. Use of the wrong topcoat could ruin your sculpture, so take the time to research the topcoat you use.

**About Nova Color Artists’ Acrylic Paint**  
We have been making Nova Color Artists’ Acrylic Paint since 1965. We use a tough, durable, 100% acrylic resin suitable for use outdoors. No additives are needed to make it suitable for exterior use. All paints are labeled with the lightfastness rating.

Nova Color is sold factory direct and is available in pints, quarts, gallons and 5-gallon pails. Nova Color is shipped to the USA and Canada. 


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