



# MARINE 861 ULTRAFAIR

## Technical Data Sheet

### EPOXY FAIRING COMPOUND

Above or below water line applications

## DESCRIPTION

Marine 861 UltraFair is a convenient trowelable epoxy filler developed for fairing large surface imperfections on aluminum, steel, fiberglass or wooden marine vessels. The white resin and brown hardener, when mixed together at the convenient 1:1 volumetric mix ratio, yield a smooth, creamy paste which can be easily applied up to 1" thick without sagging or shrinking during the curing process. 861 UltraFair Resin and Hardener are 100% solids systems and may be used above or below the waterline. When cured, this system features excellent sanding and finishing characteristics and accepts virtually all types of primers and paints. Note: This product is intended to be used as supplied. Do not thicken or thin this product as altering the formulation may lower physical properties.

## APPLICATIONS

- Large surface fairing imperfection filling/fairing
- Above or below waterline usage

## PROPERTIES

- Convenient 1:1 Volumetric Mix Ratio
- Water resistant for above or below the waterline applications
- Can be Applied up to 1" Thick Without Sagging or Shrinking During Cure
- Color Coded Positive Mix Indication
- Smooth, Creamy Paste Mixes Easily and Trowels Smoothly
- Compatible with fiberglass, wood, aluminum, steel marine vessels
- 0% VOC's (Volatile organic compounds)

| PHYSICAL PROPERTIES                    |                    |                  |                     |                                      |
|--|--------------------|------------------|---------------------|--------------------------------------|
|  | Units(s)           | Marine 861 resin | Marine 861 hardener | Mixed                                |
| Composition                            |                    | Epoxy paste      | Amine paste         | Paste                                |
| Mix ratio – by weight                  |                    | 100              | 52                  | 100/52                               |
| – by volume                            |                    | 100              | 100                 | 100/100 (1/1)                        |
| Aspect                                 |                    | Grain free paste | Grain free paste    | Creamy non-sag paste                 |
| Color                                  |                    | White            | Brown               | Light brown                          |
| Density at 77°F (25°C)                 | lbs./gal<br>(g/cc) | 9.7 (1.17)       | 5.3 (.64)           | 7.0 (.90)                            |
| Pot life (102 g) at 77°F (25°C)        | minutes            |                  |                     | 48 (1 gal. mass)<br>42 (2 gal. mass) |
| Gel time at 77°F (152 grams)<br>(25°C) | minutes            |                  |                     | 45 - 65                              |
| Cure to sand time @ 77°F (25°C)        | hours              |                  |                     | 6-8                                  |
| Total cure time @ 95°F (35°C)          | days               |                  |                     | 3-5                                  |
| @ 77°F (25°C)                          |                    |                  |                     | 5-7                                  |
| @ 55°F (13°C)                          |                    |                  |                     | 10-12                                |

## MECHANICAL AND THERMAL PROPERTIES

| Property                                   | Test Method | Units (s)   | Test Result     |
|--|-------------|---|-----------------|
| Hardness                                   | ASTM D2240  | Shore D   | 78-81           |
| Flexural strength                          | ASTM D-790  | Psi (Mpa)   | 4,300 (30)      |
| Flexural modulus                           | ASTM D-790  | Psi (Mpa)   | 260,000 (1,794) |
| Tensile strength                           | ASTM D-638  | Psi (Mpa)   | 3,700 (26)      |
| Tensile modulus                            | ASTM D-638  | Psi (Mpa)   | 211,000 (1,456) |
| Tensile elongation                         | ASTM D-638  | %   | 2.1             |
| Glass transition temperature (Tg) TMA      | ASTM E1545  | °F (°C)   | 138 (59)        |
| Coefficient of thermal expansion (CTE) TMA | ASTM E1545  | 10 <sup>-6</sup> .F <sup>-1</sup> /(10 <sup>-6</sup> .C <sup>-1</sup> ) | 29 (52)         |

## SURFACE PREPARATION and APPLICATION

*Underlying primer coverage (gauged millage) must be to manufacturer's specification and it is critical that the underlying primer system must be allowed to reach complete cure before sanding. All finished primers and/or 861 must be blown down with clean, dry compressed air or wiped to a dust free state (clean rag). Sanding or further preparation of the 861 Fairing Compound is only possible after it has been allowed to fully cure to material specifications. Skinning of the 861 Fairing Compound to itself without proper scarfing is not recommended and will result in poor adhesion.*

*To achieve desired results, it is critical that all tools, mixing boards, containers, and all other material application accessories must be free from contamination. Proper mixing of 861 Fairing Compound must be followed. A thorough mix is evident only when a positive color change appears between the resin and hardener and is homogenous throughout. It is imperative that the 861 is applied to the prepared surface immediately upon achieving a proper mix. 861 Fairing Compound must not be applied beyond the recommended pot life.*

## STORAGE CONDITIONS

- *Product shelf life of resin and hardener is 2 years when stored in original unopened containers between 65 – 77°F (15 – 25°C). Any opened can must be tightly closed. Any opened can must be tightly closed.*

## HANDLING PRECAUTIONS

*Normal health and safety precautions should be observed when handling these products:*

- *Ensure good ventilation*
- *Wear gloves, and safety glasses.*

*For additional information, please consult the safety data sheet (SDS).*



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**DISCLAIMER**

*The information contained in this technical data sheet results from research and tests conducted in our laboratories under precise conditions. Seller cannot anticipate all conditions under which seller's products, or the products of other manufacturers in combination with seller's products, may be used. It is the responsibility of the user to determine the suitability of the SikaAxson's products, under their own conditions, before commencing with the proposed application. In no event shall SikaAxson US be liable for any direct, indirect, punitive, incidental, special, and/or consequential damages, to property or life, whatsoever arising out of or connected with the use or misuse of our products.*

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