INDUSTRIAL ADHESIVES



3086-T-RF Product Data Sheet

# Ultra Light-Weld<sup>®</sup> 3086-T-RF SAN • Styrene • Acrylic • Glass • Metal

DYMAX Ultra Light-Weld<sup>®</sup> structural adhesives can be cured with UV or visible light. DYMAX Ultra Light-Weld<sup>®</sup> materials contain no nonreactive solvents and cure upon exposure to light. Their ability to cure in seconds enables faster processing, greater output, and lower processing costs. When cured with DYMAX light-curing spot lamps, focused-beam lamps, or flood lamps, these adhesives provide optimum process flexibility. DYMAX lamps offer the optimum balance of UV and visible light for the fastest, deepest cures. This product is in full compliance with RoHS directives 2015/863/EU.

## **DESCRIPTION**

Water Absorption

Ultra Light-Weld<sup>®</sup> 3086-T-RF is a very fast, structural-strength adhesive which forms excellent bonds to SAN, styrene, acrylic, glass, ceramic, and metal. Hard, rigid bonds form in seconds upon exposure to longwave (365 nm) UV and visible light. 3086-T-RF adhesive is red in color and fluoresces to provide easy in-line inspection of the adhesive bond area.

#### TYPICAL UNCURED PROPERTIES (not specifications)

| Solvent Content<br>Composition<br>Appearance<br>Flash Point<br>Solubility<br>Viscosity | None<br>Urethane Oligomer/(Meth)Acrylate Monomer<br>Red Liquid<br>>95°C (200°F)<br>Alcohol/Chlorinated Solvents<br>6,500 cP (nominal) | Blends<br>ASTM D-2556     |  |  |
|--|---|---------------------------|--|--|
| TYPICAL CURED PROPERTIES (not specifications)  |   |                           |  |  |
| Durometer Hardness<br>Elongation at Break  | D85<br>4.0%   | ASTM D-2240<br>ASTM D-638 |  |  |
| Tensile at Break   | 7,250 psi   | ASTM D-638                |  |  |
| Elongation at Yield  | 3.5%  | ASTM D-638                |  |  |
| Tensile at Yield   | 8,000 psi   | ASTM D-638                |  |  |
| Volume Shrinkage Upon Cure   | 7%  |                           |  |  |
| Refractive Index   | 1.48  | ASTM D-542                |  |  |



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## **UV LIGHT-CURE DATA**

Using 365 nm wavelength UV light [1]:

| Cure Lime | Intensity <sup>[2]</sup>     | Dymax  |
|-----------|------------------------------|--|
| (seconds) | <u>mW/cm<sup>2</sup></u>     | <u>Lamps</u>   |
| 2         | 50                           | 2000-EC  |
| 10        | 150                          | 5000-EC  |
| 60        | 50                           | 2000-EC  |
|           | ( <u>seconds)</u><br>2<br>10 | ( <u>seconds)</u><br>2<br>10<br><u>mW/cm</u> <sup>2</sup><br>50<br>150 |

## **DISPENSING AND HANDLING ADHESIVE**

This material may be dispensed with a variety of manual and automatic applicators or other equipment as required. Questions relating to dispensing and curing systems for specific applications should be referred to DYMAX Applications Engineering.

Wear impervious gloves and/or barrier cream. Repeated or continuous skin contact with liquid adhesive will cause irritation and should be avoided. Do not wear absorbent gloves. Remove adhesive from skin with soap and water. Never use solvents to remove adhesive from skin or eyes.

#### STORAGE AND SHELF LIFE

Store the material in a cool, dark place when not in use. Do not expose to light. This product may polymerize upon prolonged exposure to ambient and artificial light. Keep covered when not in use. This material has an 18-month shelf life from date of manufacture, unless otherwise specified, when stored between 10°C (50°F) and 35°C (90°F) in the original, unopened container.

## CAUTION

For industrial use only. Avoid breathing vapors. Avoid contact with eyes and clothing. In case of contact, immediately flush with water for at least 15 minutes; get medical attention. Wash clothing before reuse. Keep out of reach of children. Do not take internally. If swallowed, induce vomiting at once and call a physician. Repeated or continuous skin contact with liquid adhesive will cause irritation and should be avoided. For specific information, refer to the product Material Safety Data Sheet.

#### **GENERAL INFORMATION**

This product is intended for industrial use only. Keep out of the reach of children. Avoid breathing vapors. Avoid contact with skin, eyes, and clothing. Wear impervious gloves. Repeated or continuous skin contact with uncured material may cause irritation. Remove material from skin with soap and water. Never use organic solvents to remove material from skin and eyes. For more information on the safe handling of this material, please refer to the Safety Data Sheet before use.

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