



**MAS Slow Hardener** is a highly-regarded epoxy resin hardener that's phenol-free with modified amines. When used in conjunction with MAS Epoxy Resin it provides high reactivity and an extended gel time which allows for controlled and extended application periods. Special features exhibited by this product include blush free surfaces, good ultraviolet stability, smooth finishes in cured films, excellent osmotic resistance, and the ability to cure under high humidity. MAS Slow Hardener is intended for use with MAS Epoxy Resin and can be applied in a diverse range of conditions where increased working time is required. We highly recommend formulations of MAS Slow Hardener when large surfaces are to be coated or laminated. Slow formulation cure blush free and eliminate the need for time consuming wash downs during on-going laminations or repetitive build coats. The low viscosity of MAS Slow Hardener (200-250 poise) when mixed with MAS resin is ideal for fast wet-out of reinforcing fabrics.

MAS Fast Hardener may be added to the MAS Slow Hardener to speed up curing, however, blends exceeding 30% of MAS Fast Hardener may compromise the non-blushing characteristics of the MAS Slow Hardener. The 2:1 mix ratio, resin:hardener should be maintained, no matter what hardener or blend of hardeners are used.

**STORAGE LIFE:** A minimum of 12 months in a sealed container.

**Caution:** Not recommended for use below 65 degrees F unless extended cure time is available.

| SPECIFICATIONS                       |             | CURE TIME: 7 DAYS                   |  |
|--------------------------------------|-------------|-------------------------------------|--|
| Color (Gardner)                      | 3           | <b>PERFORMANCE:</b>                 |  |
| Viscosity @77° F, cp unmixed         | 200         | Tg                                  | Please contact factory for more information. |
| Specific Gravity @77° F              | 0.998       | Barcol Hardness (Model GYZI-935)    |  |
| Flash Point (closed cup) °F          | 234         | Bond Strength, psi (steel to steel) |  |
|                                      |             | Flexural Strength, psi              |  |
| <b>HANDLING PROPERTIES</b>           |             | Flexural Modulus, psi               |  |
| Mix Ratio: 2:1 Resin to Hardener     |             | Tensile Strength, psi               |  |
| Mixed Viscosity w/MAS Resin @77° F   | 500-600 cps | Tensile Modulus, psi                |  |
| Pot Life, mins (150g mix @77° F)     | 27          | Elongation, %                       |  |
| Thin Film Set Time, hrs. @77° F      | 5.0         | Compressive Strength, psi           |  |
| Peak Exotherm, °F (100mg mix @77° F) | 250         | Compressive Modulus, psi            |  |
| Peak Exotherm Time, mins.            | 29          | Abrasion Resistance                 |  |

Physical properties are subject to change based on formula updates. Please contact factory for more information.