ALTANA Electrical Insulation

**Epoxylite**
Technical Data Sheet

## Product: Epoxylite H1100S

**Description:** Low viscosity, single component, clear amber, epoxy resin suitable for use at Class H temperatures.

Epoxylite H1100S has a very low penetration viscosity and cures to a tough resilient product.

**Application:** Dip, trickle or VPI treatment of motors and transformers.

**Processing Characteristics:**

| | Resin | Hardener | Mixture | |
|---|---|---|---|---|
| **Viscosity** | 400 | - | - | **mPas @ 25ºC** |
| **Specific Gravity** | 1.12 | - | - | **g / cm³** |
| **Mix Ratio** | Single component | | | **p.b.w.** |
| **Mix Ratio** | Single component | | | **p.b.v.** |
| **Gelation Time** | 8 minutes | | | **@ 165ºC** |
| **Cure Schedule** | Minimum 6 – 8 hrs | | | **@ 140ºC** |
| | Minimum 3 – 4 hrs | | | **@ 165ºC** |
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| **Cured Properties:** | | |
| **Shore D Hardness:** | (DIN 53505) | **87 (25ºC)** |
| **Thermal Class:** | (ASTM D2307 / 20000 hrs) | **180ºC** |
| **Glass Transition Temp.** | (IEC 1006) | **90ºC** |
| **Tensile Strength:** | (ISO 527) | **75 N/mm²** |
| **Elongation at Break:** | (ISO 527) | **5 %** |
| **Thermal Coefficient of Expansion:** | (DIN 53752) | **$60.10^{-6}K^{-1}$** |
| **Thermal Conductivity:** | (ISO 8894-1) | **0.21 W/mK** |
| **UL Recognition:** | | **TI 180** |
| **Water Absorption:** | (ISO 62) | **0.2 % (23ºC)** |
| **Dielectric Strength:** | (IEC 243-1) | **190 kV/cm** |
| **Dielectric Constant:** | (IEC 250) | **4.2 20ºC** |
| **Dissipation Factor:** | (IEC 250) | **2% 20ºC** |
| **Volume Resistivity:** | (IEC 93) | **> $10^{15}$ ohm/cm** |
| **Comparative Tracking Index:** | (IEC 112) | **> 550 Volts** |

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| **Storage:** | Minimum storage life 12 months in tightly closed containers at temperatures below 25°C. |
| **Handling:** | Refer Material Safety Data Sheet. |
| **Issue:** | 06/06/2005 |



ALTANA
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