UNILINK 4230®
CURING AGENT

PRODUCT DATA GUIDE

DESCRIPTION
Unilink 4230 is a liquid curing agent designed to provide a good balance of chain extension and cross-linking with all standard TDI-based polyurethane pre-polymers. It is a blend of Dorf Ketal’s unique di-functional diamine, Unilink 4200, and tetra-propoxylated ethylene diamine.

Pre-polymers made with Unilink 4230 generally exhibit longer pot lives, lower hardness and excellent physical properties than those made with commonly used curing agent methylene bis-oxychloro-analine (MbOCA). Many high quality elastomers can be formulated for both hot and room temperature cured applications.

TYPICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Dark Amber Liquid</td>
</tr>
<tr>
<td>Specific Gravity at 60°F</td>
<td>1.01</td>
</tr>
<tr>
<td>Density, lb/US gallon</td>
<td>8.3</td>
</tr>
<tr>
<td>Flash Point, PMCC °F (°C)</td>
<td>350°F  177°C</td>
</tr>
<tr>
<td>Viscosity at 60°F (16°C), cps</td>
<td>4000</td>
</tr>
<tr>
<td>Viscosity at 100°F (38°C), cps</td>
<td>265</td>
</tr>
<tr>
<td>Water content, %</td>
<td>&lt;500 ppm</td>
</tr>
<tr>
<td>Toxicity, LD50, mg/kg (Acute oral, rat):</td>
<td>&gt;1400</td>
</tr>
<tr>
<td>Ames Test</td>
<td>Negative</td>
</tr>
<tr>
<td>Equivalent Weight</td>
<td>130</td>
</tr>
<tr>
<td>Hydroxyl Number</td>
<td>432</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>2 Years</td>
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</tbody>
</table>

Unilink 4230 contains 70% (Equivalent Weight) Unilink 4200 diamine.

FEATURES
• Convenient pre-blended chain extender/crosslinker
• Safe, easy to handle liquid
• Low toxicity - Ames negative
• Longer pot life than other curing agents
• Improved flow and adhesion
• Low moisture sensitivity
• Compatible with a wide range of polyols, co-curatives and all other polyurethane chemicals.

APPLICATIONS
Unilink 4230 has found applications in polyurethane coatings, adhesives, sealants, elastomers and a range of metal and concrete repair compounds. With the correct choice of pre-polymer, stoichiometry and catalyst system, a wide range of pot life, hardness and product properties can be achieved. Polyurethane systems can be readily formulated for both hot or ambient temperature cure.
### USE LEVEL

The amount of Unilink 4230 curative to be used per 100 parts of TDI pre-polymer (php) can be calculated using this standard formula:

\[
\text{(% free NCO content)} \times \text{[Unilink 4230 Equivalent Weight (130)]} \times \text{Stoichiometry} / 42
\]

### ORDER AND SHIPPING INFORMATION

This product is available from Dorf Ketal Chemicals, LLC and authorized distributors. Please contact us for the name of the nearest distributor.

### PACKAGING

Unilink 4230 is available in non-returnable 55 gallon drums and in bulk container based on prior agreement.

### SAFE HANDLING RECOMMENDATIONS

Store in tightly closed, properly labeled containers in a cool, well-ventilated area away from all ignition sources. Avoid contact with eyes, prolonged or repeated contact with skin and the inhalation of vapors. Do not take internally. Never use welding or cutting equipment on or near full or empty containers as product vapors can ignite explosively. For further details regarding safety and handling of this product, please consult the current Material Safety Data Sheet.

### HAZARD CLASSIFICATION

DOT/ADR/RID Hazard Class: Not regulated

IMO HAZARD CLASS: Not regulated

### TECHNICAL ASSISTANCE

For technical assistance or samples of Unilink 4230 diamine, please contact Dorf Ketal Chemicals, LLC or an authorized distributor. Please contact us at 281-491-3700 for the name of your nearest distributor. You may also receive the name of your nearest authorized distributor at the telephone number above or by contacting us by e-mail at: queries.northamerica@dorfketal.com.