Solid base to build on.

Epoxy Grout Volume

Hilti Epoxy Grout Volume is a Buy American-compliant, three component, 100% solids, VOC and BGE free, high performance epoxy grouting system. This specially formulated grout offers high strength providing excellent resistance to impact and vibration. Using the most advanced amine technology this grout meets today’s needs of an effective and easy to use epoxy grout designed to help protect people and the environment. Hilti’s Epoxy Grout Volume comes with a non-corrosive hardener, avoiding the risk of burns like with other epoxy products and making it a DOT-non-hazardous product simplifying transportation and storage.

Order Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Package Contents</th>
<th>Qty</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Grout Volume — 9 Kits</td>
<td>9 Kit Offering (18 ft³ Yield)</td>
<td>1</td>
<td>03486376</td>
</tr>
<tr>
<td>Epoxy Grout Volume — 90 Kits (FTL)</td>
<td>90 Kit Offering (180 ft³ Yield)</td>
<td>1</td>
<td>03486377</td>
</tr>
</tbody>
</table>

Technical Data

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Epoxy Grout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength, psi (MPa) at 73 ºF (23 ºC)</td>
<td>ASTM C 579 8 h</td>
<td>6,000 (41)</td>
</tr>
<tr>
<td></td>
<td>ASTM C 579 16 h</td>
<td>12,000 (83)</td>
</tr>
<tr>
<td></td>
<td>ASTM C 579 1 day</td>
<td>12,500 (86)</td>
</tr>
<tr>
<td></td>
<td>ASTM C 579 3 days</td>
<td>14,000 (97)</td>
</tr>
<tr>
<td></td>
<td>ASTM C 579 7 days</td>
<td>15,000 (103)</td>
</tr>
</tbody>
</table>

Compressive modulus, psi (MPa) | ASTM D 695 568,000 (3,917) |

Flexural strength, psi (MPa) | ASTM C 580 7 days 3,900 (27) |

Tensile strength, psi (MPa) | ASTM C 307 7 days 2,100 (14) |

Bond to concrete (complete concrete failure), psi (MPa) | ASTM C 882 ≥ 550 (4) |

Adhesion to steel (clean, sandblasted), psi (MPa) | ASTM D 696 2,500 (17) |

Coefficient of thermal expansion, 10-5/ ºC | ASTM D 648 1.74 |

Heat distortion temperature, °F (ºC) | ASTM D 648 70 (43) |

Working time at 72 ºF (22 ºC), min | 45 |

Gel time at 72 ºF (22 ºC), min | ASTM D 2471 90 |

Yield, (1) EG V Kit | 4 Bag Mix 1,66 ft³ (0.047 m³) |

Packaging — (9) Kits (2 pallets total) | Part A Resin 2.89 gal (10.94 L) |
| • (9) 5 gal pails of Resin (Part A) | Part B: Hardener 0.69 gal (2.61 L) |
| • (9) 1 gal pails of Hardener (Part B) | Part C: Aggregate 48.0 lb. (21.8 kg) |

Shelf life | 24 months from date of manufacture when stored properly in original unopened container |

The data shown above reflect typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

Application Instructions

Read product instructions and MSDS before use.

Preparation

The surfaces to be grouted must be solid, clean and free from oil, grease and other contaminants that may act as a bond breaker. Remove all loose material and laitance. Concrete surfaces must be dry, sound and roughened to obtain proper bond. The grout and the affected grouting area should be kept between 50 °F and 90 °F (10 °C and 32 °C) and shaded from direct sunlight. During cold weather it is important to flow to the opposite and adjacent sides thereby avoiding air entrapment. Where grout cannot be adequately worked to fill the cavity (because of large size or limited space), a head box will greatly assist flow.

Formwork

Standard wood or metal forming may be used. The formwork must provide rapid, continuous grout placement and needs to retain grout without leakage. The forms should be protected with heavy coats of paste wax, grease or form release agent. For baseplates, forms should be at least 1" (2.54 cm) higher than the bottom of the baseplate. The forms should have 45° angle chamfer strips at all vertical corners and horizontal grout grade elevation in order to eliminate sharp corners. The clearance for remaining sides (distance between the baseplate and the form) shall be 2-6" (50 to 152 mm).

Mixing

Each EG V Kit consists of (1) pail of resin, (1) pail of hardener and (4 to 5) bags of aggregate. Pour the hardener into the resin container and mix with a slow speed mixer (400 to 600 rpm) for approximately 1 to 2 minutes until thoroughly blended (the mix will show a uniform color). Keep the mixing paddle submerged to avoid air entrapment. Pour mixed resin and hardener into a larger mixing device without delay. While mixing at low speed, slowly add the aggregate, one bag at a time, and mix until thoroughly blended (aggregate must be completely wet). Adjust the amount of aggregate used to achieve the desired consistency (minimum of 4 bags to maximum of 5 bags).

Application

Immediately after mixing, place grout from one side allowing it to flow to the opposite and adjacent sides thereby avoiding air entrapment. Provide vent holes where needed to prevent air entrapment. Where grout cannot be adequately worked to fill the cavity (because of large size or limited space), a head box will greatly assist flow.

Advantages

- Non-corrosive hardener — no risk of burns
- Non-hazardous per DOT shipping classification
- VOC and BGE free
- High early and ultimate strengths
- High vibration resistance
- Deep pour, low shrinkage
- Self-leveling
- High resistance to a variety of chemicals
- Best in class epoxy grout for worker safety
- Excellent flow capability

Trades and Facilities

- Civil projects
- Concrete professionals
- Energy facilities
- General contractors / construction managers
- Industrial plants
- Ornamental steel artisans
- Steel erectors

Purposes and Uses

- Grouting of machinery and equipment with high load requirements
- Precision alignment under dynamic load conditions
- Structural grouting of baseplates, columns, beams, crane rails, bridge seats, dowels, etc.
- Chemical processing facilities

Hilti Epoxy Grout Volume (EG V)