Epolite Amine-Free

Coating Precautions
1. Do not use the product until you have read the instructions for use provided in the catalogue.
2. Using thinner products other than those specified by our company may result in decreased workability or failure to achieve the specified performance.
3. Thoroughly degrease object surfaces before coating.
4. Use thinner as quickly as possible once they are diluted.
5. Depending on the type of coating used, it may not be possible to achieve the desired interlayer adhesion. Check coating compatibility before use.
6. The cured coating will exhibit extremely good cutting oil resistance and chemical resistance. However, please note that surface activity will remain high before the coating is fully cured. Take care to keep the coating from reacting with acids and alkaline components in a dry atmosphere (e.g., steel processing fluids) and becoming discolored.

Expiration Date and Precautions on Storage
1. The expiration date following shipment from our company (before opening) is six months for the main agent, three months for the hardener, and one year for the thinner. Once opened, use the products as quickly as possible.
2. This hardener will react with moisture in air (humidity). Use as quickly as possible.
3. Keep products stored in hazardous material storage.
5. Store in a cool, dark, and well-ventilated place.
8. Store away from exposure to direct sunlight and in locations at which temperatures remain below 40 °C.

Precautions on Safety and Sanitation

> Precautions on Use
1. Keep your face away from the container when opening it.
2. Handle with care. Damaged containers pose risk of contamination or fire. Keep containers upright during transportation and storage. Do not place on an air conditioner.
3. Do not use near flames or sources of ignition.
4. Install local ventilation systems in places where the products are handled.
5. Take care to avoid direct contact between the product and skin during handling. Wear protective gloves, protective clothing, eye protection, and face protection.
6. In case of spillage, scatter sand or other inert materials over the spill and collect.
7. Wash hands and rinse mouth and throat thoroughly after handling.
8. Do not eat, drink, or smoke when using this product.

> First Aid Measures
1. If on skin or in hair, immediately remove all contaminated clothing and wash with plenty of soap and water. Seek medical attention if you feel pain or notice any injuries.
2. If in eyes, flush with plenty of water. Get immediate medical attention.
3. If inhaled and feeling unwell, remove the person to fresh air and place at rest. Get medical attention if necessary.
4. If swallowed, get immediate medical attention.

> Firefighting Measures
1. In case of fire, use carbon dioxide gas, foam or powder fire extinguishing agents or dry sand to extinguish.

> Disposal
1. Empty the containers completely before disposal.
2. Dispose of containers in accordance with local regulations.
3. Dispose of coating materials, coating containers, and coating tools as industrial waste.
4. Other
   1. Refer to the product Safety Data Sheet (SDS) for more information.
   2. The present product is designed for indoor applications. Refrain from use outdoors or in places exposed to direct sunlight for extended periods.

Note: The contents of the present catalog are subject to change without notice.
Note: The results of testing or various resistance characteristics are based on in-house evaluations. They do not constitute a guarantee of product quality or performance.
Note: Unauthorized reproduction or use of the contents, texts, or images in the present catalog is strictly prohibited.

Please contact us (see below) for more information.

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EPOLOG USE 30921
Features

Amine-Free
The product is free of amines, known to be strong skin irritants.

Superior cutting oil resistance achieved through careful selection of ingredients and superior blending technologies
Unlike other cutting oil resistance achieved through selection of special modified epoxy resin as the main agent, three-dimensionally cross-linked with isocyanate

Outstanding adhesion
The product exhibits excellent adhesion to various metal surfaces, including aluminum and stainless steel.

Eco-friendly
Our commitment to the environment
- The total concentration of toluene, xylenes, MBK, and styrene is kept below 0.1%.
- The use of chemical substances designated in the PRTR Act has been reduced by more than 99% (compared to existing products, based on results of in-house testing, as of July 2020).
- Complies with all requirements of the Ordinance on Prevention of Dangers Due to Specified Chemical Substances (amended in June 2017).
- Entirely free of ten hazardous substances* whose use is restricted by the RoHS Directive
  * Benzene, benzyl chloride, benzophenone, hexylphenol, p-phenylenediamine, pentachlorophenol, pentachlorothiophene, phenol, styrene, tetrahydrofuran, trichloroethane

Intended Use
Metal products that require oil resistance and chemical resistance, such as machine tools and industrial machines

Color
301Gray/802 Black/901 White
For custom colors, please contact our sales representative.

Volume
Epoxy Amine-Free main agent: 16 kg
Epoxy Amine-Free hardener: 4 kg

Specialized thinners
Thinner 4200 S (for summer)/SW (for spring and fall)/W (for winter): 16 L

Instructions for Use
1. Pretreatment
   Thoroughly degrease the surface before applying the epoxy resin.

2. Agitation
   Agitate the coating material thoroughly before dilution.

3. Dilution and Mixing
   The mixing ratio is main agent: hardener = thinner = 4:1:1:2.
   Use Thinner 4200, Measure precisely to adjust the mixing ratio by weight.

4. Application (spray coating)
   Preparation
   Room temperature 25°C
   Humidity 35-45%
   Thinner 1.5-3.5
   Standard coat thickness 10-35μm
   Coverage Approx. 200g/m²

   Application
   Date to the brush 15 mins.
   Hardened and cured 3-5 hours
   Forced curing (50°C, 60°C) 30 mins.

   Note: In case of thinning, a mixing time of 30-60 minutes after application at room temperature. For curing, use the recommended curing temperature and time.

5. Drying and Curing
   Room temperature (25°C)
   Forced curing (50°C, 60°C)

Results of Coat Performance Tests (Epoxy Amine-Free 301 Gray)

<table>
<thead>
<tr>
<th>Test Items</th>
<th>Results</th>
<th>Test Conditions</th>
</tr>
</thead>
</table>

Adhesion
cross-cut tape with adhesive tape

Topcoat compatibility
NEXUS NX two-part acrylic urethane main coating
After application, cure the topcoat at 90°C for 30 minutes.
Total coat thickness is 80 μm (undercoat: 40 μm, topcoat: 40 μm).

Epoxy Cutting Oil Resistance Test (Epoxy Amine-Free 301 Gray)

<table>
<thead>
<tr>
<th>Tested Cutting Oil</th>
<th>Type</th>
<th>Immersed</th>
<th>Results</th>
<th>Test Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthia 9654</td>
<td>Water-soluble, synthetic</td>
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<td>Synergy 815</td>
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<td>B-Coal MC 610</td>
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<tr>
<td>Bihoodles BC 2300</td>
<td>Water-soluble, emulsion</td>
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</tr>
</tbody>
</table>

Note: Curing conditions for test sheets left to cure at room temperature for 14 days after application

Note: *Product of BP Japan K.K., **Product of Bihoodles Co. Ltd., ***Product of Bisco Showa Kasei Co., Ltd.