Resene Aquaclear
waterborne urethane varnish

Resene Aquaclear has been developed as a waterborne alternative to turps thinned oil modified urethanes to enhance and protect timber. Where maximum abrasion resistance is required, such as high traffic floors, a moisture-cured urethane, such as Resene Polythane (see Data Sheet D53), is recommended.

Also available in Natural version for a flat clear finish on interior timber walls and ceilings.

Typical uses

- Cork
- Desks
- Doors
- Fibre and particle board
- Furniture
- Panelling
- Parquet
- Skirtings
- Solid timber
- Veneers

Satin, semi-gloss and gloss versions may be used on timber flooring. Natural flat variant is not recommended on timber flooring.

Performance

1. Low odour application and drying.
2. Water wash up.
3. Easy recoating.
4. Satin, semi-gloss and gloss are Environmental Choice approved products.

Limitations

1. Do not apply at temperatures below 10°C or when it is liable to drop below 10°C during the drying period.
2. Dries very quickly at high temperatures and low humidity. Maintain a wet edge.
3. Not recommended for high abrasion areas.
4. Allow 72 hours for coating to reach full cure.

Physical properties

<table>
<thead>
<tr>
<th>Vehicle type</th>
<th>Urethane/ acrylic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigmentation</td>
<td>Flatting agents</td>
</tr>
<tr>
<td>Solvent</td>
<td>Water</td>
</tr>
<tr>
<td>Finish</td>
<td>Satin, semi-gloss, gloss</td>
</tr>
<tr>
<td>Colour</td>
<td>Turbid - dries clear</td>
</tr>
<tr>
<td>Dry time (minimum)</td>
<td>30 minutes at 18°C</td>
</tr>
<tr>
<td>Recoat time (minimum)</td>
<td>2 hours; full cure: 72 hours</td>
</tr>
<tr>
<td>Theoretical coverage</td>
<td>Satin, semi-gloss, gloss - 12 sq. metres per litre per coat. Natural flat - 10 sq. metres per litre per coat. 23 microns at 12 sq. metres per litre</td>
</tr>
<tr>
<td>Dry film thickness</td>
<td>3. New work – 4 minimum. An additional coat is recommended in areas prone to higher wear and tear</td>
</tr>
<tr>
<td>Usual no. of coats</td>
<td>Fair</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>Thermoplastic</td>
</tr>
<tr>
<td>Heat resistance</td>
<td>Good</td>
</tr>
<tr>
<td>Solvent resistance</td>
<td>Good</td>
</tr>
<tr>
<td>Durability</td>
<td>Water. First coat may be thinned with up to 10% clean water. Application is difficult at high temperatures and low humidity. Up to 5% Resene Hot Weather Additive may be added. 95 grams per litre (see Resene VOC Summary)</td>
</tr>
<tr>
<td>Thinning and clean up</td>
<td>95 grams per litre (see Resene VOC Summary)</td>
</tr>
</tbody>
</table>

VOC

Please ensure the current Data Sheet and Safety Data Sheet are consulted prior to specification or application of Resene products. View Data Sheets online at www.resene.com/datasheets. If in doubt contact Resene.
Aquaclear waterborne urethane varnish

Surface preparation

New wood
Thoroughly sand surface. Ensure surface is clean and dry, free from dirt, dust and loose material, oil, grease and mould.

Old wood re-varnish
Prepare as for new wood. Ensure surface is clean and dry, free from dirt, dust and loose material, oil, grease and mould. Sand to dull finish with fine sandpaper and remove sanding dust. If old varnish is flaking, everything must be removed to ensure a uniform appearance.

Sanding dust from old lead or chromate based paints or old building materials containing asbestos may be injurious to the health if inhaled or ingested. Seek expert advice if the presence of these materials is suspected.

Application

Satin, semi-gloss and gloss: Application by speed brush is recommended. May also be applied by bristle brush and spray. Roller application is not recommended because of the likelihood of excessive foam formation. Apply Resene Aquaclear evenly, avoiding working back over areas that have begun to set as this will lead to a patchy finish.

Natural flat: Apply by roller using a Resene No.4 roller sleeve, spray, speed brush or a synthetic bristle brush.

Waterborne clear finishes are more sensitive to oil and grease than solventborne finishes. If there is any doubt about the level of preparation possible, whether all oil and grease has been removed or the environment in which timber doors are to be finished in, apply a sealer coat of Resene Qristal Clear solventborne clear finish first.

New fibre and particle board
1. Apply one coat of Resene Aquaclear thinned with up to 10% clean water. Allow to dry for at least two hours.
2. Apply three coats unthinned of Resene Aquaclear allowing at least two hours between coats. Lightly sand with fine sandpaper between coats.

Timber - new
1. Apply one coat of Resene Aquaclear thinned with up to 10% clean water. Allow to dry for at least two hours.
2. Apply three coats unthinned of Resene Aquaclear allowing at least two hours between coats. Lightly sand with fine sandpaper between coats.

Timber – recoat
After preparing surface, apply three coats unthinned as for timber - new.

Precautions
Avoid breathing vapour - use with adequate ventilation.