VR-1120
VALUECLEAR VOC

Description
2-component Low Emission clear, to be used in clear over base system. Composition based on acrylic copolymer.

Products
VR-1120 ValueClear VOC
VR-1130 ValueActivator Fast
VR-1131 ValueActivator
VR-1132 ValueActivator Slow

Properties
- Can be used for spot, panel and overall repair.
- VOC compliant, conform with directive 2004/42/EC.

Substrates
- DuPont Refinish Waterborne Basecoats and activated DuPont Refinish Solventborne Basecoats.
- All cleaned and sanded OEM and cured repair finishes (not recommended on thermoplastic acrylic finishes).
**VR-1120**

**VALUECLEAR VOC**

**PRODUCT PREPARATION**

<table>
<thead>
<tr>
<th>Mixing ratio</th>
<th>Spot and panel</th>
<th>Standard</th>
<th>High temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume</td>
<td>Weight</td>
<td>Volume</td>
</tr>
<tr>
<td>VR-1120</td>
<td>2</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>VR-1130</td>
<td>1</td>
<td>51</td>
<td>-</td>
</tr>
<tr>
<td>VR-1131</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>VR-1132</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**VOC**

- 420 g/l

**Pot life at 20°C**

- VR-1130: 1 hr 30 min
- VR-1131: 2 hr
- VR-1132: 2 hr

**Spray viscosity at 20°C**

- DIN 4: 19-21 s
- FORD 4: 20-22 s
- AFNOR 4: 22-24 s

**Spray equipment**

- Conventional guns
  - Gravity feed
    - 1.4-1.6 mm
    - 1.6-1.8 mm
    - 1.0-1.2 mm
  - Suction feed
    - 15-20 cm
  - Pressure feed
    - 3-4 bar
- Compliant guns (HVLP/HTE)
  - Gravity feed
    - 1.3-1.5 mm
    - 1.5-1.6 mm
    - 1.0-1.2 mm
  - Suction feed
    - 10-15 cm
  - Pressure feed
    - According to supplier’s specifications

<table>
<thead>
<tr>
<th>Spray equipment</th>
<th>Fluid tip</th>
<th>Distance</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional guns</td>
<td>15-20 cm</td>
<td>3-4 bar</td>
<td></td>
</tr>
<tr>
<td>Compliant guns (HVLP/HTE)</td>
<td>10-15 cm</td>
<td>According to supplier’s specifications</td>
<td></td>
</tr>
</tbody>
</table>

**Number of coats**

- 1.5

**Flash time**

- 0-3 min between coats.
- 5-10 min before bake.

**DFT**

- 50-65 µ

**Drying**

<table>
<thead>
<tr>
<th>Drying</th>
<th>VR-1130</th>
<th>VR-1131</th>
<th>VR-1132</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust-free Dry to handle Tape-free</td>
<td>25 min x 60°C</td>
<td>35 min x 60°C</td>
<td>45 min x 60°C</td>
</tr>
<tr>
<td>Imm. 45 min 2 hr 30 min</td>
<td>imm. 45 min 2 hr 30 min</td>
<td>imm. 45 min 2 hr 30 min</td>
<td></td>
</tr>
</tbody>
</table>

**IR drying**

<table>
<thead>
<tr>
<th>IR drying*</th>
<th>Flash time</th>
<th>Distance</th>
<th>Half power</th>
<th>Full power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 min</td>
<td>80 cm</td>
<td>5 min</td>
<td>15-20 min</td>
</tr>
</tbody>
</table>

* Guideline for short/medium wave IR equipment.

This data relates only to the material designated herein and does not apply to use in combination with any other material or any process. The data is not to be considered as a warranty or quality specification and we assume no liability in connection with its use.
RECOMMENDED USE

Surface preparation

1. Clean surface with water and soap. Rinse and dry.
2. Degrease with a correct DuPont Refinish preparatory cleaner. Wipe dry with a clean cloth.
3. Repair according to damage.
4. Degrease with a correct DuPont Refinish final cleaner/degreaser. Wipe dry with a clean cloth.
5. Tack rag.
6. If needed, apply a DuPont Refinish Waterborne Basecoat.

Clearcoat application

When the Basecoat is completely flat, apply VR-1120 in 1 light coat immediately followed by a full coat.

Chemical resistance

When fully cured, VR-1120 is resistant to short exposures of the chemicals as listed:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Percentage</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hydroxide</td>
<td>20 %</td>
<td>battery acid</td>
</tr>
<tr>
<td>sulphuric acid</td>
<td>25 %</td>
<td>toluene</td>
</tr>
<tr>
<td>hydrochloric acid</td>
<td>10 %</td>
<td>xylene</td>
</tr>
<tr>
<td>phosphoric acid</td>
<td>20 %</td>
<td>diesel</td>
</tr>
<tr>
<td>ammonia</td>
<td>10 %</td>
<td>brake fluid</td>
</tr>
</tbody>
</table>

Equipment cleaning

Use a correct DuPont Refinish solventborne gunwash.
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RECOMMENDED USE (con’d)

Recoatability
At any time after tape-free time. After 24 hr, scuff sanding is required.

Remarks
- Close can of activator tightly immediately after use, as this product will react with humid air and water and lose its hardening effect.
- Activated material should not be returned to original can of non-activated material.
- Dry spray spots in the clear can be worked off with AK350 at very low spray pressure. This should be done at the latest 5 min after clear application and should be avoided on horizontal parts.
- For flexible systems, see specific TDS.
- For mixing rod information, see specific TDS.
- Material has to be at room temperature (18-25°C) before use.

Product data

Package viscosity: 130 cp
Theoretical coverage: 9-10 m²/l at recommended DFT - ready-to-spray
Directive 2004/42/EC: 2004/42/IIB(d) (420)420: The EU limit value for this product (product category: IIB(d)) in ready to use form is maximum 420 g/l of VOC. The VOC content of this product in ready to use form is maximum 420 g/l.

Products

<table>
<thead>
<tr>
<th>Products</th>
<th>Packages</th>
<th>Shelf life at 20°C (year)</th>
<th>Density (kg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VR-1120</td>
<td>1 - 5</td>
<td>4</td>
<td>0.988</td>
</tr>
<tr>
<td>VR-1130</td>
<td>1</td>
<td>3</td>
<td>1.023</td>
</tr>
<tr>
<td>VR-1131</td>
<td>1</td>
<td>3</td>
<td>1.023</td>
</tr>
<tr>
<td>VR-1132</td>
<td>1</td>
<td>3</td>
<td>1.020</td>
</tr>
</tbody>
</table>

Safety
Consult Safety Data Sheet prior to use. Observe the precautionary notices displayed on the container.
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**REPAIR SYSTEMS**

**Overall repair**

Pay attention to the application method. Spray procedure has to ensure proper overspray melt-in which is achieved within 2 min of the clear application. Plan the process to avoid dry overspray.

**Spot repair: AK350 Fade-out Thinner method**

1. Apply 1 coat of VR-1120 over the basecoat, extending into the area surrounding the spot.
2. Apply a 2nd coat of VR-1120, extending further into the area surrounding the spot.
3. Smoothen out the fade-out area with AK350 within 5 min maximum.
4. Optionally extend the fade-out area with AK350 within 5 min maximum.

! Surface should be carefully and correctly prepared before the basecoat application.

! Stay with the application of AK350 within the prepared area

If necessary, balance out the gloss level by polishing with a non silicone containing polishing compound or a non silicone containing final glaze, after complete hardening of the repair.