EC310 MIDCOAT CLEAR is a low-build intercoat clear designed specifically to hold dry flakes and pearl additives in suspension, providing maximum control for custom color and effect applications. That means less settling in the cup and better consistency out of the gun. More importantly, the suspending agents in this specialty clear also allow for more uniform distribution and orientation of effect particles for even, repeatable results. This fast-drying formula is low-build, making it easier to stack multiple coats without fear of excessive film thickness.

Unlike competitive intercoat clears, EC310 is an activated urethane, making it far more durable and less prone to any coat-to-coat adhesion problems caused by sandwiching single-component air-dry films in between urethane coatings.

Kirker’s Midcoat Clear Flake & Pearl Carrier is packaged in a round gallon can and a round quart can, both ¾ full to allow plenty of space for blending in effect additives at high speed.

**COATING TYPE:**
Midcoat Clear

**PRODUCT CODE:**
EC310
EC310QT

**ACTIVATORS:**
UA-1600M – Medium temp (below 80°F)
UA-1600S – Slow temp (above 80°F)

**REDUCERS:**
Additional reduction is not required
UR-9065 / UR-8065 Fast (Low temp)
UR-9075 / UR-8075 Medium (Mid temp)
UR-9085 / UR-8075 Slow (High temp)
UR-9095 / UR-8095 Super slow (Very high temp)
UE-8000 Universal Zero-VOC Reducer

**PHYSICALS:**
Appearance: Water-clear liquid
Weight per unit: 8.13 lbs/gallon
Package Measure: EC310 3/4 U.S. Gallon / 96 fl. oz. / 2.84 liters
EC310QT 3/4 U.S. Quart / 24 fl. oz. / 0.71 liters
Packaged VOC: Actual: 190.1 grams/liter (1.59 lbs/gallon)
Regulatory: 347.3 grams/liter (2.9 lbs/gallon)
Ready for Use VOC: When mixed as directed (3:1), the combined system VOC will not exceed 305.6 grams/liter (2.6 lbs/gallon)
SURFACE PREP:
EC310 Midcoat Clear should be applied over basecoat or single-stage topcoat once the previous coat has had sufficient time to flash. Follow the recoat recommendations on the label and/or Technical Data Sheet instructions for that specific system. If freshly-applied ground coat has passed it's recoat window, then surface must first be abraded before application of EC310.

If applying over a factory finish or other cured substrate, the entire surface should be clean, dry and free of any traces of wax, grease, silicone, oil or any other contaminants. Wash with hot water and detergent, followed with a solvent wash (such as Kirker’s 650 Wax & Grease Remover). Sand existing finish to abrade with 600-800 grit, then reclean with a final wash cleaner (such as Kirker’s 600 Surface Wash).

Be sure to mask all adjacent panels before spraying.

MIXING:
Unlike most clearcoats, this product is packaged in a round gallon can or a round quart can, and only ¾ full. This short fill is intentional to allow room in the container for high speed blending.

Once thoroughly shaken, open can and mix EC310 Midcoat Clear using a variable-speed electric drill with a mixing wand attachment. Begin with mixing blades fully submerged in the coating. Slowly increase power until material is mixing under force with a visible vortex around the shaft of the mixing wand. Once material is stirred sufficiently, begin adding Kirker Super Flakes, Holographic Flakes, Shimmer Pearls, Shifty Pearls or other effect additives. Shake or spoon additives directly into the vortex and continue blending at high speed until effect particles appear uniform throughout.

See Technical Data Sheet for Super Flakes, Holographic Flakes, Shimmer Pearls or Shifty Pearls for recommended amounts and other important details.

Contents should be blended again every few minutes, or any time more material needs to be mixed. Once Flake and/or Pearl additive is blended into Midcoat Clear, pour mixture into a marked mixing cup, then add activator as needed.

Mix ratio is 3:1 by volume. Thoroughly mix three (3) parts EC310 Midcoat Clear with one (1) part of the appropriate Activator (UA-1600M, available in both quarts and half-pints, or UA-1600S) depending on air flow and shop temperature.

<table>
<thead>
<tr>
<th>Temperature range</th>
<th>Below 80° F and small jobs</th>
<th>Above 80° F and large jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activator</td>
<td>UA-1600M (Medium)</td>
<td>UA-1600S (Slow)</td>
</tr>
</tbody>
</table>

While additional reduction is not required, it may help aid in flow (use a slow or super slow speed).

Not strain Midcoat Clear after Flakes have been added.

POT LIFE:
Approximately 2 hours at 70°F

Caution: Pot life of mixed components is significantly shorter at elevated temperatures and in humid conditions. These environmental factors also may affect flow and leveling during the application process.
GUN SETTINGS:

<table>
<thead>
<tr>
<th>GUN TYPE</th>
<th>TIP SIZE</th>
<th>AIR PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Siphon Feed</td>
<td>1.4 mm – 1.6 mm*</td>
<td>45-55 psi at the gun</td>
</tr>
<tr>
<td>Conventional Gravity Feed</td>
<td>1.3 mm – 1.5 mm*</td>
<td>45-55 psi at the gun</td>
</tr>
<tr>
<td>HVLP</td>
<td>1.3 mm – 1.4 mm*</td>
<td>8-10 psi at the tip</td>
</tr>
</tbody>
</table>

Always refer to gun manufacturer’s recommendations for additional details on suggested tip size, air pressure and other adjustments.

*Fluid Tip recommendations above are for EC310 with Shimmer Pearl, Shifty Pearl or other similar-sized effect particles. A larger tip will be required when using flakes:

<table>
<thead>
<tr>
<th>Flake Type</th>
<th>Particle Size</th>
<th>Microns</th>
<th>Minimum Fluid Tip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Flake</td>
<td>.004” (1/256)</td>
<td>100</td>
<td>1.4 mm</td>
</tr>
<tr>
<td>Holographic Flake</td>
<td>.008” (1/125)</td>
<td>200</td>
<td>1.8 mm</td>
</tr>
</tbody>
</table>

APPLICATION:

Apply in even medium wet coats, building until the desired effect is achieved. Allow at least ten (10) minutes flash time between each coat. Consistent air pressure and gun settings and steady application technique are critical to achieve uniform results.

Depending on ground coat color choice and desired effect, some Flake and/or Pearl additives will require more coats than others to achieve coverage. Midcoat Clear will dry dust free within 10-20 minutes. This clear must be topcoated (with any of Kirker’s gloss or matte finish clears, or SPECTRA Series Urethane Candy Colors), within 18 hours.

Refer to Technical Data Sheet for the Flake or Pearl effect additive being used in combination with EC310 Midcoat Clear for more application instructions specific to the type of effect chosen.

Do not allow Midcoat clear to cure (18 hours at 70°F) without first putting a topcoat clear over it. A cured Midcoat Clear will have to be sanded before proceeding. Sanding will smear and/or disrupt pearl and flake additives, and require additional coats to be applied. Do not tape directly over Midcoat Clear with flake. Do not sand or scuff Midcoat Clear. Doing so will smear or otherwise disrupt the appearance of effect additives irreversibly.

Apply at least one full coat of clear over the last coat of Midcoat Clear with flake in it.

DRY TIMES / RECOAT:

EC310 Midcoat Clear will dry dust-free in 10-20 minutes.

Midcoat Clear can may topcoated with a urethane candy color or urethane clearcoat as soon as the previous coat has sufficiently flashed. Avoid recoating too soon to prevent refloating flakes.

EC310 may be recoated for up to 18 hours (+/- depending on air temperature). Do not allow Midcoat clear to cure without first putting a topcoat clear over it. Any sanding required to promote mechanical intercoat adhesion will disrupt flakes, pearl and other effect additives irreversibly.
CLEANUP:
Close container tightly after each use. Clean gun and spray equipment with gun wash or other appropriate solvent products immediately after application to prevent damage.

Shelf life of UA-1600M and UA-1600S Activator is limited once cans have been opened. These products are extremely susceptible to oxygenation and exposure to moisture. Therefore, containers should be closed tightly after each use, with a clean seal, as quickly as possible. Also, activators should be stored at a consistent temperature to prevent the formation of potentially damaging condensation inside of the can.

HEALTH / SAFETY PRECAUTIONS:
THIS PRODUCT IS INTENDED FOR USE BY PROFESSIONALS ONLY.

USE THIS PRODUCT ONLY WITH ADEQUATE VENTILATION: Wear appropriate, properly fitted fresh-air-supplied NIOSH/MSHA-approved respirator (TC-19C or equivalent) as directed by the manufacturer. Protect hands with impervious nitrile gloves. Always wear eye and face protection. Individuals with lung or breathing problems should neither use nor be exposed to this product, its vapors or spray mist. READ ALL WARNINGS ON ALL LABELS BEFORE USING.

This product is designed to be mixed with other components. Mixture will have hazards of all components. Before opening the packages, read all warning labels. Follow all precautions. See Material Safety Data Sheet for additional health and safety information.

SEE SAFETY DATA SHEET FOR MORE COMPLETE HEALTH, SAFETY AND FIRST AID INFORMATION.

WARRANTY:
All recommendations for the use of Kirker products are based on tests and experience believed to be reliable. It is the responsibility of the purchaser to determine the suitability of this product for its intended use. Since the methods of use, conditions of application, and the application itself are beyond the manufacturer’s and seller’s control, product warranty is restricted to replacement of defective material only. No other warranty, written or oral, is expressed or implied.

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