Safety Information

Introduction

Before working with Autosurfacer UV, important information is needed to safely handle the UV equipment and to protect the user.

Personal Protection

Eyes: Avoid to look directly into the UV light source
Always wear UV protective safety goggles.

Skin: Make sure exposed skin is covered

UV equipment handling

Equipment Handling:
UV equipment is safe to use when operated according to the manufacturers’ guidelines and instructions. Some general recommendations can be given.

- Avoid unnecessary exposure.
- Never use a HID lamp with a broken UV glass filter.
- Never look directly into UV light.
- Never point the UV light at someone else.
- Always use the recommended personal and operational protective measures.
- Experimenting with different light sources is associated with severe health risks.

Use Near Spray Booth:
Use of equipment in potentially explosive atmospheres
Spray booths are zone 2 areas during the spraying operations. Therefore use of the UV equipment, which is not EX approved, should be in compliance with local regulations, this should be verified before using the equipment.

It’s required that safety systems and procedures are in place by using integrated spray booth systems. Integrated systems need to ensure that sufficient purging of the painting (zone 2) area is achieved.

Thermal Safety:
High Intensity Discharge lamps produce heat that may cause high temperatures at the lamp filter surface. It must be avoided that the filter comes near or in direct contact with potentially flammable surfaces, e.g. masking paper or the spray booth floor paint filters.

Waste:
UV bulbs/ tubes must be handled as chemical waste.

Maintenance of the Equipment

Regular inspection and cleaning of the UV filter glass on the high intensity discharge (HID) lamps is necessary to secure maximum UV output. The UV-output will drop significantly in case of contaminated glass filters.

Performance measurement and registration
It is recommended to measure the lamp performance regularly and to choose a measuring method that is always at a similar distance and position. Don’t forget to wear sufficient personal protection as recommended by the lamp manufacturer.
Keep a log of the in use hours of the measured UV irradiation level.

Bulb Life expectancy, especially those from the HID lamps, is influenced on usage. Therefore follow these recommendations: When HID-lamps are switched OFF, let them cool down sufficiently before switching ON again. Most lamp manufacturers recommend a 5-10 minutes cool down period (see manufacturers’ manual). When the unit is in use or still warm after use, place it carefully back in the right position thereby avoiding rough handling i.e. dropping, etc. (see manufacturers’ manual).
Autosurfacer UV is a one-component UV curable surfacer suitable for small repairs. The surfacer only needs 5 minutes of curing by UV light and offers customers the opportunity to drastically reduce the repair preparation and processing time.

### Safety Considerations
Use suitable personal protection. AkzoNobel recommends the use of a fresh air supply respirator. Refer to the Safety Data Sheet (SDS) for more complete safety information.

### Aerosol Can Usage
- **Application distance** – Approximately 5”-7” (12-18 cm)
- Apply 2 coats with 2 minute flash between coats.
- Invert the aerosol and depress the nozzle after use. This allows the propellant to clean the nozzle.

#### Flash Between Coats at 70°F (21°C)
- 2 minutes

#### Flash Before Force Drying at 70°F (21°C)
- 5 minutes

### In Can Liquid Usage
- Product is supplied ready to spray. Shake well before using.

#### Spray gun set up:
- 1.2-1.4 mm

#### Application Pressure:
- 1.7-2.2 bar at the air inlet
- HVLP max 0.6-0.7 bar at air cap

- Apply 2 coats with 2 minute flash between coats.

#### Flash Between Coats at 70°F (21°C)
- 2 minutes

#### Flash Before Force Drying at 70°F (21°C)
- 5 minutes

- Minimum 5 minutes
- Irradiate the coated area constantly with a 400 Watt UV lamp

- Recoatable with all Sikkens topcoats
## Suitable Substrates

- Existing finishes
- Steel
- Aluminum
- Electrolytic galvanized steel
- Glass reinforced polyester laminates
- Polysurfacer
- Zinc coated steel
- AutoPrep Pretreatment Wipes

Autosurfacer UV can be applied over rigid plastics such as ABS, PC, PC-PBT, PPO and PP-EPDM that have been preceded by Primer PO LV or Primer PO.

Autosurfacer UV can be applied over flexible substrates such as TPO bumper that have been preceded by Primer PO LV or Primer PO without the need for flexible additive.

Note: Autosurfacer UV is NOT intended for large areas of bare metal. It will however provide adequate adhesion if applied directly to small metal areas. For small bare metal areas which must meet the highest standards, we advise application of Autosurfacer UV over Sikkens AutoPrep Pre-Treatment Wipes. Do not apply Autosurfacer UV over acid containing wash primers. Allow for a minimum of 15 minutes flash-off at 70°F/21°C after pre-treatment application.

## Products and Additives

<table>
<thead>
<tr>
<th>Product</th>
<th>Item #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autosurfacer UV Aerosol</td>
<td>#483303</td>
</tr>
<tr>
<td>Autosurfacer UV Light Grey</td>
<td>#546748</td>
</tr>
<tr>
<td>Autosurfacer UV Dark Grey</td>
<td>#546749</td>
</tr>
</tbody>
</table>

## Basic Raw Materials

- Acrylic polymers, acrylic monomers, pigments and mineral charge

## Substrate Preparation

### Pre-Cleaning
- If needed pre-wash the repair with warm soap and water. Rinse completely with clean water. Clean with Sikkens M600, AutoPrep Ultra Prep Surface Cleaner or Anti-Static surface cleaners.
- Avoid saturating body filler with water or cleaners while washing the repair.

### Sanding Preparation

<table>
<thead>
<tr>
<th></th>
<th>Dry Sanding</th>
<th>Wet Sanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Finishes</td>
<td>#P220 – #P3200</td>
<td>#P500 – #P600</td>
</tr>
<tr>
<td>OEM E-Coat</td>
<td>Not Required</td>
<td>Not Required</td>
</tr>
<tr>
<td>Polyester Bodyfiller</td>
<td>#P180–#P220</td>
<td>N / A</td>
</tr>
<tr>
<td>Steel</td>
<td>#P80 then #P120</td>
<td>N / A</td>
</tr>
<tr>
<td>Galvanized Steel</td>
<td>#P120 – #P180</td>
<td>N / A</td>
</tr>
<tr>
<td>Aluminum</td>
<td>#P180 – Red Pad</td>
<td>N / A</td>
</tr>
<tr>
<td>Non-Polyolefin Plastic</td>
<td>#P320 – #P400</td>
<td>#P500 – #P600</td>
</tr>
</tbody>
</table>
Surface Cleaning – Prior to Paint Application
- Clean with Sikkens M600, AutoPrep Ultra Prep Surface Cleaner or Anti-Static surface cleaners.

Bare Metal Pre-Treatment
- Autosurfacer UV provides adequate adhesion to small bare metal areas. For larger areas or for improved corrosion protection Autosurfacer UV should be applied over a metal pre-treatment such as the AutoPrep Pretreatment Wipes or AutoPrep Etch Pen.

Product Agitation

Stirring
- Shake the aerosol can by hand for 5-10 minutes prior to use.
- The liquid material should be placed on a mechanical shaker for 5-10 minutes prior to use.

Mixing – General

Product is supplied ready to spray.

Pot-Life

Autosurfacer UV has unlimited Potlife (within product shelf life parameters) when stored in its original container away from direct UV exposure. Autosurfacer UV cannot be stored in clear storage containers (ie. PPS cups). Over time, the light will begin the curing reaction.

Spray Gun Set-Up

<table>
<thead>
<tr>
<th>Spray Gun</th>
<th>Fluid Tip</th>
<th>Application Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVLP Gravity Fed</td>
<td>1.2-1.4 mm</td>
<td>1.7-2.2 bar</td>
</tr>
</tbody>
</table>

Consult spray gun manufactures instructions for specific spray gun pressure specifications.
Aerosol Can Application

Hold aerosol approximately 5”-7” (12-18 cm) from the panel and apply 2 coats.

Autosurfacer UV is transparent to allow proper curing of the filler. **Do not spray until hiding. Too much layer thickness may cause adhesion failures due to insufficient through cure.**

Allow each coat to flash-off naturally, this also supports to achieve higher film build. Do not force-dry with air support. Flash-off between the coats is dependent on ambient temperature, applied layer thickness and airflow.

Do not apply Autosurfacer UV below a temperature 60°F (15°C). At lower temperature solvent retention in the coating is higher and may cause loss of gloss in time.

After application, invert aerosol and depress the nozzle for 2-3 seconds. This allows the propellant to clean the nozzle sufficiently for further use.

In Can Application

Apply 2 coats of Autosurfacer UV.

Allow a flash off time between coats of 2 minutes. Flash time will be dependent on ambient temperature, applied paint wetness/thickness and available air-flow.

Film Thickness – Using Suitable Application

2 Coats will achieve a thickness of 3.2-4.0 mils (80-100 μm).

Drying / Curing Time

Drying times are stated a recommended application method, film thickness and object temperature.

Using a 400 watt UV lamp 5 minutes at UV exposure

Using the UV unit according to recommendations which includes a 3 minutes heat up time.

For curing of Autosurfacer UV place the UV lamp at 30 - 40 inches distance.

*There is no risk for over-cure by longer cure times and shorter lamp distances.

If 2 spots are positioned very close to each other and the footprint of the UV lamp is too small to cure both spots at once, make sure that the UV lamp does not irradiate one of the spots partially. Partial irradiance may cause wrinkling!

2 Options are possible:

1. Cure the spots separately at close distance; making sure that only one spot is irradiated at the time.
2. First move the UV lamp slowly over the surface once, then post cure the spots one by one according to the standard procedure.
<table>
<thead>
<tr>
<th>Final Sanding</th>
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</thead>
<tbody>
<tr>
<td>Final sanding step P500</td>
</tr>
<tr>
<td>• Initial sanding steps may be executed with a coarser sanding grit; P360 - P400</td>
</tr>
<tr>
<td>• Respect a maximum 100 sanding grit step difference or less throughout the sanding procedure.</td>
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</tbody>
</table>

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<td>Surface Cleaning – Prior to Paint Application</td>
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<td>• Clean with Sikkens M600, AutoPrep Ultra Prep Surface Cleaner or Anti-Static surface cleaners.</td>
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<tr>
<th>Recoating</th>
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<tbody>
<tr>
<td>Sanded and cleaned Autosurfacer UV can be topcoated with all Sikkens Topcoats.</td>
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</table>

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<th>Cleaning of Equipment</th>
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<tbody>
<tr>
<td>Clean equipment following local and federal regulations. In compliant localities, use Sikkens LV Cleaning Solvent or high quality solvent borne gun cleaner. For national rule regions, use Sikkens Cleaning Solvent or high quality lacquer thinner.</td>
</tr>
</tbody>
</table>
Theoretical Coverage

Theoretical coverage is dependent of many factors. These may include; the shape of the object, surface smoothness, application technique and other application variables among others.

- 855 Sq ft / gallon
- 21 M² / liter

VOC / Regulatory Information

<table>
<thead>
<tr>
<th>Product</th>
<th>VOC (lbs/gal)</th>
<th>VOC (g/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autosurfacer UV Light Grey</td>
<td>1.69 lbs/gal</td>
<td>203 g/L</td>
</tr>
<tr>
<td>Autosurfacer UV Dark Grey</td>
<td>1.69 lbs/gal</td>
<td>203 g/L</td>
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Product Storage

<table>
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<tr>
<th>Product</th>
<th>Storage Life</th>
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<tbody>
<tr>
<td>Autosurfacer UV Aerosol</td>
<td>9 months</td>
</tr>
<tr>
<td>Autosurfacer UV (Light and Dark Grey)</td>
<td>1 year</td>
</tr>
</tbody>
</table>

FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advices given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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