# GENERAL INFORMATION

Axalta’s Ultraguard™ is the latest breakthrough in formaldehyde-free coatings technology designed exclusively for the wood products market. Based on proprietary formaldehyde free resin formulation technology, the Ultraguard™ family of coatings provides market leading durability, ease of application, and zero-formaldehyde emissions performance. Ultraguard™ is ideal for office & residential furniture, kitchen & bath cabinetry and interior doors & millwork.

# PRODUCTS

* AKS0230

# MIXING RATIO

* All products should be stirred well before use and, for best results, continuously agitated while in use.
* Catalyzation: 4% CXC0141 catalyst by volume

# SHELF LIFE @ 77°F (25°C)

* 18 months from manufacturing date

# CLEAN UP

* Dispose of dirty solvent and cleaning rags in a safe and compliant manner. Solvent or lacquer soaked rags should be stored in water-filled, closed containers prior to disposal.

# ADDITIVES

* Add Axalta YXT1008 Lacquer Retarder to extend dry time. See Additional Notes portion of this document for details.

# SURFACE PREPARATION

* Surface must be clean and dust free with a moisture content of 6-8% prior to finishing. Remove all dust, dirt, wax and wood marks. Proper sanding and preparation of the wood is critical to achieving consistent results.
* On new wood, finish sand surface with 150-180 grit sandpaper
* On previously finished wood, remove all old paint or varnish and follow new wood procedure.

# COMPANION PRODUCTS

* VWS0550 Series GRAINTONE PLUS Wiping Stains
* VWS0909 GRAINTONE PLUS Neutral Wiping Stain Base
* VSS1094 Axalta Spray Stainl Base

# TECH NOTES

* If reduction is necessary, use Axalta 390-7001-00 Lacquer Thinner. See Additional Notes portion of this document for details.

# #SUBSTRATES

* Commonly used furniture and cabinetry woods
* MDF/HDF

**NOTE:** Not to be used on exterior applications

# APPLICATION

* See Application Notes for additional details.

# FLASH / DRY TIMES

**AIR DRY @ 77°F (25°C)**

|  |  |
| --- | --- |
| Dry to touch | 30-45 Minutes |
| Flash between coats | 35 - 45 Minutes |
| To Stack | 12 - 24 Hours |

**12. FORCE DRY**

|  |  |
| --- | --- |
| Flash | 10 Minutes |
| Bake | 15 Minutes @ 125°F |
| Cool Down | 10 Minutes ambient |
| Stack | After cool down |

# GUN SET UP

|  |  |
| --- | --- |
| Gravity Feed | 1.6 mm - 1.8 mm |
| Siphon Feed | 1.8 mm – 2.0 mm |
| Airless | 10 – 15 thousandths |
| Air-Assisted Airless | 11 – 15 thousandths |

**AIR PRESSURES**

|  |  |
| --- | --- |
| Gravity Feed | 30-35 psi (2.0-2.4 bar) |
| Siphon Feed | 35-40 psi (2.4-2.8 bar) |
| Air-Assisted Airless | 10-20 psi (0.7-1.4 bar) |
| See spray gun manufacturer data for more information | |

1. **PHYSICAL DATA**

|  |  |
| --- | --- |
| Viscosity | 23-26 SEC #2 EZ Zahn at 25˚C (~77˚F) |
| Weight Solids % | 30.02% |
| Volume Solids % | 22.71% |
| Actual VOC | 5.94lbs/gal of Product |
| VOC Ratio (lb.voc/lb.solids) | 3.57 lb VOC/lb solid |
| Regulatory VOC  (less water and exempt solvents) | 637.64 g/l |
| Weight Per Gallon | 7.61 lbs/gal |
| Flash Point | -17°C (~1°F) |
| Theoretical Coverage | 364.30 ft/gal @ 1 mil dry |
| VHAP (lb.HAP/lb.solids) | 1.09 lb VHAP/lb solid |
| Coating Category | Clear |

**Application Notes:**

All products should be stirred well before use and, for best results, continuously agitated while in use. Do not mix with other finishing systems or deviate from these finishing recommendations. Axalta will not be held liable for finish failures resulting from the mixing of products or deviations from finishing recommendations. Sanding should be completed immediately prior to the application of any additional coats.

**1) Stain:** If desired, stain substrate with Axalta’s VWS0550 Series GRAINTONE PLUS™ Ready-Mix Wiping Stains, VWS0909 GRAINTONE PLUS™ Wiping Stain Base, VSS0194 Spray Stain Base, or other approved Axalta color system. Refer to specific Technical Data Sheet for detailed use instructions.

**2) Seal:** While under agitation, catalyze UVS0050 at 4% by volume with CXC0141. Only catalyze enough material for use within 8 hours. Allow 15 minutes for catalyst to stabilize in solution. Verify the surface is clean and dust free, then apply an even coat of 3–4 wet mils.

**3) Glazing:** If glazing is desired use either VWS0807 GRAINTONE PLUS™ Conversion Varnish Glaze Base or LWS4750 ZENITH™ Waterborne Glaze Base. If using VWS0807 ensure self-seal coat has dried a minimum of 6 hours before applying glaze. Wipe glaze clean and ensure glaze as air dried for a minimum of two hours before topcoating. If using LWS4750 ensure self-seal coat has dried 2 hours before glazing, wipe clean and allow glaze to dry 2 hours before topcoating. VWS0912 GRAINTONE PLUS™ Glaze Base is **NOT** permitted for use with Ultraguard™.

**4) Finish:** Choose the appropriate sheen from the AKF023X Series Ultraguard™ products and ensure product has been catalyzed 3% by volume with CXC0141. Verify the surface is clean and dust free, then apply an even coat of 3–4 wet mils.

If additional coats are required, wait a minimum of 30 minutes between applications. Sand with 280–320 grit stearated, silicon carbide sandpaper before recoating.

If reduction is necessary, use Axalta YYT1009 Lacquer Thinner. See Additional Notes portion of this document for additional details. In the event of blushing or blistering, add Axalta YXT1008 Lacquer Retarder to extend dry time. See Additional Notes portion of this document for details.

*IMPORTANT NOTE:* ***System’s total dry film build should not exceed 4 dry mils.*** *A higher build may result in a film breakdown or reduction in performance.*

**Clean Up:**

Use lacquer thinner to clean equipment. Refer to your local regulations for compliance requirements for cleaning thinners, or use recommended Axalta Lacquer Thinner. Dispose of dirty solvent and cleaning rags in a safe and compliant manner. Solvent or lacquer soaked rags should be stored in water-filled, closed containers prior to disposal.

**Precautions:**

These products are recommended for professional application and are designed for interior use only. Always pre-test the system on your substrate and under your line conditions to verify suitability to the application and to avoid potential need for costly refinishing. Axalta Industrial Wood Coatings are designed to protect and enhance the natural beauty of wood, but cannot eliminate natural discoloration or deterioration of wood as it ages.

**Additional notes:**

Do not mix with other finishing systems or deviate from these finishing recommendations. Axalta will not be held liable for finish failures resulting from the mixing of products or deviations from finishing recommendations.

|  |  |
| --- | --- |
| **Catalyzation:** | 4% by volume CXC0141 |
| **Pot-Life** | 8 - 10 hours |
| **Reduction:** | Max. 10% by volume YYT1009\* |
| **Retarder:** | Max. 3% by volume YXT1008 |

\*As allowable within regulatory compliance requirements

**Storage:**

Store in a cool, dry place. DO NOT FREEZE! Product should be stored in temperatures between 50°-110°F. Close all containers after use. Do not store near heat or sparks. Spills should be cleaned up with non-sparking tools. See the product SDS for complete safety information.

**Warning:**

Always pre-test the system on your substrate and under your line conditions to verify suitability to the application and avoid potential need for costly refinishing. All dry times listed are as tested under ideal indoor environmental conditions of 78°F (26°C) with relative humidity not exceeding 50%. These products are recommended for use under temperature conditions of 60-100°F (16-38°C) and when relative humidity is below 50% during application and drying time. Low temperatures, poor air circulation or high humidity will extend dry times. **Axalta strongly recommends against use of these products if temperatures of air, material, or surface to be coated are below 60°F (16°C) or below the dew point. Abnormal conditions of temperature or humidity may adversely affect product performance.** Please contact your authorized Axalta Industrial Wood Coatings distributor for additional product use recommendations and finishing guidance.