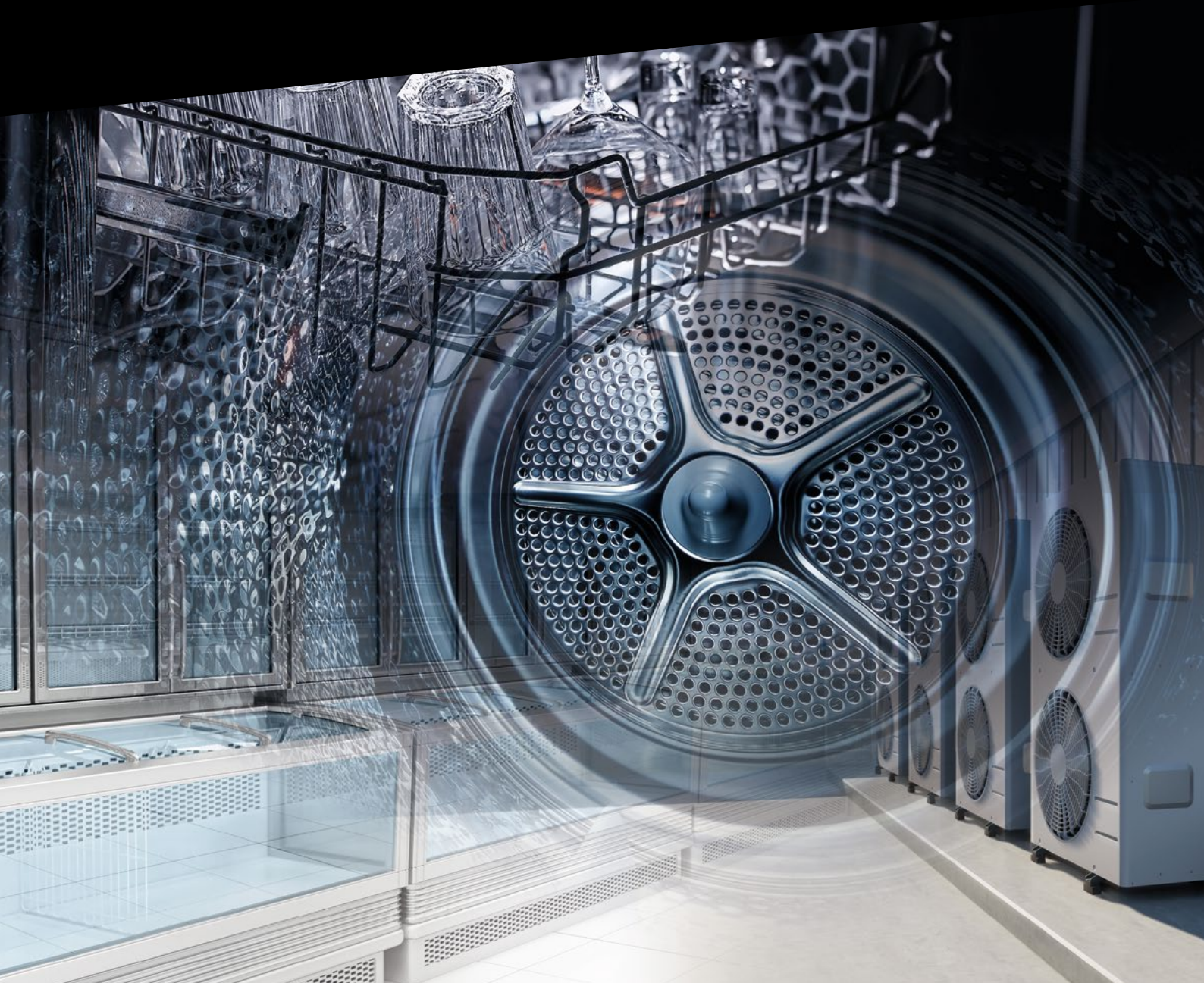


Appliances

Durable coatings for domestic goods



Long-lasting protection



for your appliances!

Axalta Coating Systems: your one-stop-shop for all your needs!

Axalta offers a variety of powerful coatings that meet the diverse needs of the world's main appliance manufacturers. From a range of primary coatings to products for more demanding applications, Axalta has the best solution for every need and every market requirement. Our thermoplastic and liquid coatings guarantee durable protection for wire items such as refrigerator shelves, dishwasher baskets, kitchenware, freezer evaporation trays and heat exchangers.

Our thermosetting coatings protect the exterior of home appliances and are available in a wide range of colours and surface effects. Axalta's electrocoats are high-performance products that are formulated to provide reliable mechanical strength and superior corrosion protection.

“As a major coating provider available worldwide, Axalta guarantees you supply security, strong expertise and the most efficient solutions for all your projects.”

Thermoplastic coatings

Plascoat® Applicat

Talisman

Plascoat® NG30

Wireguard

Thermosetting coating

Alesta®

Coil coating

Ceranamel™

Electro coating

AquaEC™





Dishwasher

Axalta has a long history of providing a range of high-performance thermoplastic powders for the coating of dishwasher baskets to the world's main domestic and industrial appliance manufacturers.

Talisman®

Talisman® is a high-performance coating powder that is comparable to nylon powder. Talisman® outperforms nylon in many ways and is a popular choice in industries looking to reduce their material costs while improving the quality of their coated products. In addition to a significant cost advantage over nylon, Talisman® also shows some distinct performance benefits, as proven in extensive field and laboratory tests at Axalta or at appliance manufacturers themselves.

Colour range: multiple silver, dark and light grey shades (specific colours can be developed upon request)

Application method: fluidised bed (dipping)/spraying

Recommended layer thickness: 200-600 µm

Recommended temperature/Coating duration: metal pre-heating at 360-420 °C, post-heating at 170-210 °C

More information: www.axalta.com/talisman

Key features and benefits:

- Higher resistance to staining and yellowing than nylon
- Significantly outlasts nylon in terms of dishwasher wash cycles
- Excellent resistance to dishwasher chemicals and salt spray
- Complete EU, FDA (Food and Drug Administration) and Chinese food-contact compliance
- RoHS-compliant
- Lower application temperature and therefore lower energy usage than nylon
- VOC-free, phthalate-free, halogen-free, plasticiser-free
- Better adhesion than nylon

basket coating

Plascoat® Applicoat

Building on over a decade of experience in the coating of wire dishwasher baskets, Axalta developed a hybrid solution blending the performance of Talisman with the much-appreciated hardness of nylon.

Colour range: multiple silver, dark and light grey shades (specific colours can be developed upon request)

Application method: fluidised bed (dipping)/spraying

Recommended layer thickness: 200-600 µm

Recommended temperature/Coating duration: metal pre-heating at 360-420 °C, post-heating at 170-210 °C

More information: www.axalta.com/plascoat

Key features and benefits:

- Improved adhesion versus nylon
- Comparable hardness to nylon
- Higher resistance to staining and yellowing than nylon
- Significantly outlasts nylon in terms of dishwasher wash cycles
- Excellent resistance to dishwasher chemicals and salt spray
- Complete EU, FDA (Food and Drug Administration) and Chinese food-contact compliance
- RoHS-compliant
- VOC-free, phthalate-free, halogen-free, plasticiser-free



Dishwasher basket

Comparison of technical specifications

| | Talisman® | Plascoat® Applicoat | Nylon coating |
|---|------------|---------------------|------------------|
| Chemistry | PP | Hybrid | PA |
| Density | 0.97-1.01 | 0.97-1.02 | 1.05 |
| Bulk density [g/cm ³] | 0.40 | 0.40 | 0.60 |
| Melting point [°C] | 154-158 | 155-162 | 184-188 |
| Hardness (shore D) | 58 | 63 | >70 |
| Hardness (shore A) | 98 | 98 | 98 |
| Viscosity [190 °C/2.16 kg] | 5-9 | 5-9 | 5-9 |
| Impact strength-Plate drop test (internal method) | >300 drops | >300 drops | >300 drops |
| Impact resistance | >2 J | >2 J | >2 J |
| Elongation at break | 500% | >300% | 50% |
| Abrasion resistance | 69 mg | 69 mg | 67 mg |
| Water absorption | <0.05% | <0.05% | >0.05 (up to 1%) |

Dishwasher baskets - Specific in-use testing

| In-use testing | Talisman® | Plascoat® Applicoat | Nylon coating |
|----------------------------------|-----------|---------------------|---------------|
| Heat resistance (4 hrs @ 130 °C) | Pass | Pass | Pass |
| Chemical/media resistance | Pass | Pass | Pass |
| Blackcurrant juice | Pass | Pass | Pass |
| Eosin technical dye | Pass | Pass | Fail |
| Odour test (3 hrs @ 80 °C) | Pass | Pass | Pass |
| Tomato juice | Pass | Pass | Pass |

coating

General comparison

| Criteria | | Talisman® | Plascoat® Appliccoat | Nylon coating |
|------------------------|--------------------------------------|-----------|----------------------|---------------|
| Processing | Powder consumption | ★★★ | ★★★ | ★★ |
| | Energy usage | ★★ | ★★ | ★ |
| | Stability | ★★★ | ★★★ | ★★ |
| | Recycling | ★★★ | ★★★ | ★★ |
| Mechanical performance | Adhesion (without primer) | ★★★ | ★★★ | ★★ |
| | Abrasion | ★★★ | ★★★ | ★★★ |
| | Elongation | ★★★ | ★★ | ★ |
| | Impact | ★★ | ★★ | ★★ |
| | Hardness | ★ | ★★ | ★★★ |
| | Resistance to staining and yellowing | ★★★ | ★★★ | ★★ |
| Durability | Resistance to chemicals | ★★★ | ★★★ | ★★ |
| | Outlast dishwasher wash cycles | ★★★ | ★★★ | ★★ |
| | Food contact compliance | ★★★ | ★★★ | ★★★ |



General wirework coating

Axalta has developed a range of polyethylene powder coatings designed to satisfy the needs of the wirework industry. Thermoplastic powder coatings offer coatings that range from wire encapsulation to full adhesion, providing long lasting performance.

Plascoat® NG30

The free-flowing properties of Plascoat® NG30 allow for good edge coverage, with a minimal overall coating thickness at a considerably lower pre-heating temperature.

Types of applications: all kinds of indoor wirework applications, such as domestic refrigerator shelves and kitchenware

Colour range: black and white
(specific colours can be developed upon request)

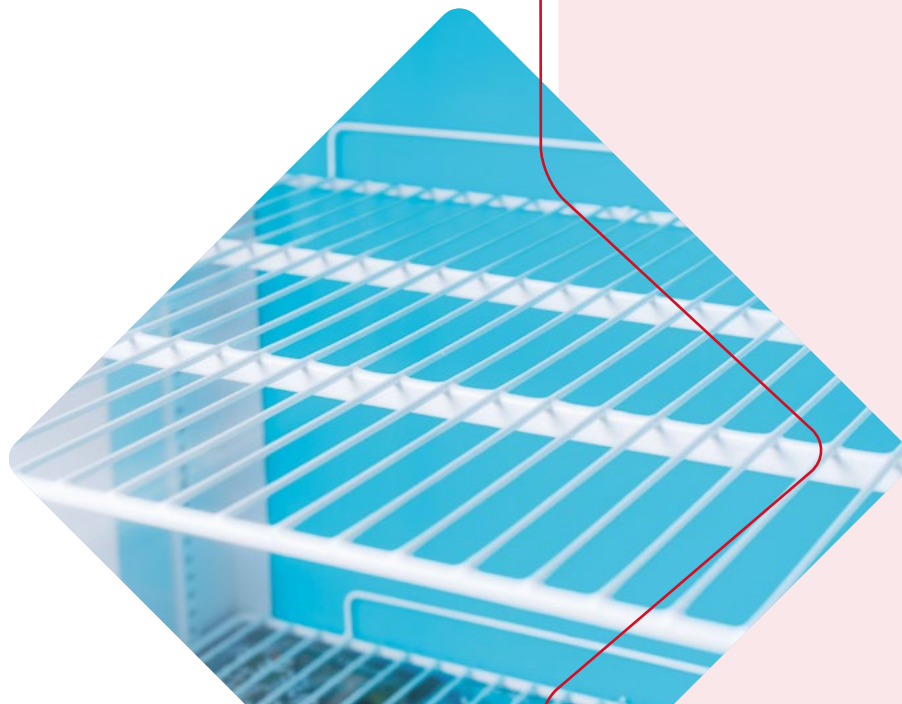
Application method: fluidised bed (dipping)

Recommended layer thickness: 300-700 µm

More information: www.axalta.com/plascoat

Key features and benefits:

- Cost-effective thanks to:
 - lower processing temperatures (up to 100 °C)
 - lower powder consumption (up to 30%)
- Excellent fluidising properties
- Unique flow-out
- Good edge coverage
- No yellowing
- Excellent stress crack resistance
- VOC-free, BPA-free, phthalate-free, halogen-free, plasticiser-free
- RoHS-compliant
- No primer required
- Food-contact compliant (FDA & EU)
- Used by world's major appliance companies





Wireguard

Going one step beyond, our Wireguard solution offers superior adhesion and UV-resistance. The Wireguard range has been specifically designed as an economical and more sustainable solution to PVC coating. And there's no need for extra ventilation, as Wireguard emits no hazardous fumes during the application.

Types of applications: refrigerator shelving, both commercial and industrial, HVAC

Colour range: black and white
(specific colours can be developed upon request)

Application method: fluidised bed (dipping)

Recommended layer thickness: 300-700 μm

More information: www.axalta.com/wireguard

Key features and benefits:

- UV-resistance
- Enhanced substrate adhesion
- Cost-effective thanks to:
lower powder consumption (up to 30%)
- Excellent fluidising properties
- Unique flow-out
- Good edge coverage
- No yellowing
- Excellent stress crack resistance
- VOC-free, BPA-free, phthalate-free, halogen-free, plasticiser-free
- RoHS-compliant
- No primer required
- Food-contact compliant (FDA & EU)

External coating

The standards for the aesthetic quality of the finishes along with the demand for various colours and special effects are continuously increasing. Therefore Axalta offers you two different technologies with their specific features.

Alesta®

Refrigerators, washing machines and dishwashers are usually finished with epoxy-polyester powder coatings. The Alesta® range offers multiple colours and finishes to guarantee the aesthetic quality of your products while offering excellent corrosion protection and mechanical properties.

Type of applications: refrigerators, washing machines and dishwashers, HVAC

Colour range: wide range of colours and surface effects available: smooth, fine-textured, leatherette, coarse-textured, metallic

Application method: spraying

Recommended layer thickness: 60-80µm

More information: www.axalta.com/alesta-ep

Key features and benefits:

- Wide range of colours and surface effects available
- Excellent mechanical properties
- Good corrosion resistance
- Easy application
- Reduced material consumption
- High productivity
- Excellent reactivity
- Very good flow
- RoHS-compliant





Ceranamel™

Coil coating Ceranamel™ XT-30 is designed to provide a new level of coating hardness, abrasion and stain resistance for difficult coil-coating applications. Ceranamel™ XT-30 contains a proprietary super tough polyester resin which provides the required hardness while maintaining flexibility.

The Ceranamel™ XT-30 coating system was specifically developed to replace and upgrade the current coating products that are just not hard and tough enough to handle complex design and end-user requirements.

Types of applications: refrigerators, washing machines and dishwashers, HVAC

Colour range: available in a wide variety of standard and custom colours and textures

Layer thickness: 35-40 µm

More information: www.axalta.com/ceranamel

Liquid Spraying

Customized solution are possible on demand

Key features and benefits:

- Best stain resistance package
- Ultimate performance for transit abrasion, mar resistance and scratch resistance
- Wide variety of standard and custom colours and textures
- Designed for application on a wide range of primed substrates, including hot-dipped, galvanised, zinc-aluminium alloy steel, cold-rolled steel and aluminium
- Designed to be applied as two-coat primer/finish system

Structures & parts

For the domestic goods that have certain shapes and features Axalta offers you electrocoating, with the revolutionary product AquaEC™.

AquaEC™

AquaEC™, our electrocoat range, has excellent mechanical properties and chemical resistance and offers superior corrosion protection. This product is particularly valuable to prevent corrosion on parts with sharp edges.

The primer is based on a lead- and tin-free, waterborne formula, which makes it more environmentally-friendly as well as REACH- and HAPS-compliant. Another advantage is its great throwing power, which makes hard-to-reach areas easy to coat. This helps with complex parts configurations, as well as high rack density. AquaEC™ is the ideal solution to be applied on a variety of substrates. The result?

A smooth surface finish thanks to its wide application window and high contamination resistance.

AquaEC™ is available as an anodic and cathodic technology.

Types of applications: heat exchangers, washing machine, air conditioners, radiators

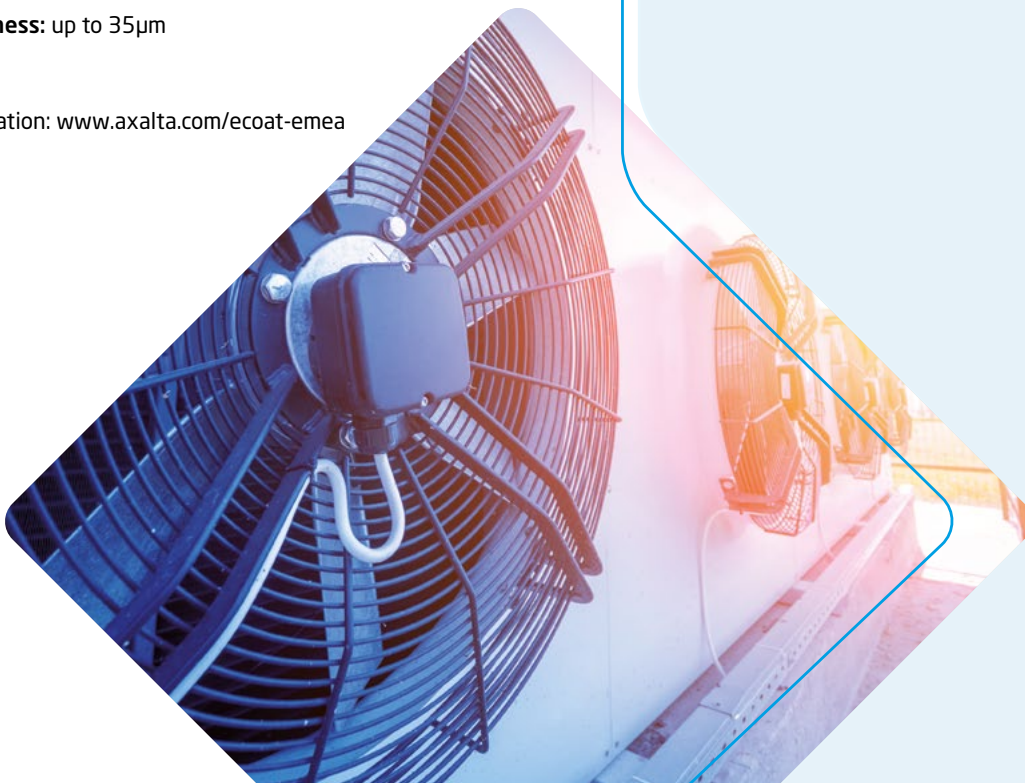
Colour range: white and black

Layer thickness: up to 35µm

More information: www.axalta.com/ecoat-emea

Key features and benefits:

- Superior corrosion protection
- Excellent stone chip resistance
- Suitable for a wide range of substrates
- Robust operation window
- Improved edge protection
- Good mechanical resistance
- High contamination resistance (lower crater sensitivity)
- Smoother surface
- High throwing power
- RoHS-compliant





One-stop-shop for all

Axalta provides a coating solution for every appliance project! One shop, all needs are covered.

We summarized the coating solutions adapted to various appliances, in an easy-to-read table, so you can find the relevant products at a glance. Our Axalta experts are always at your disposal to guide you through our portfolio, and find the perfect coating for your need.

| | | Dishwashers | Refrigerators | External air conditioning | Washing machines | Others |
|-----------------------|-------------------------|------------------|-----------------------------------|--------------------------------|------------------|---|
| Thermoplastic coating | Plascoat® NG30 | | Wire shelves | | | Kitchenware/ Ice baskets |
| | Wireguard | | Wire shelves | Fan grills | | |
| | Talisman | Baskets | Wire shelves | | | |
| | Plascoat® Appliccoat | Baskets | Wire shelves | | | |
| Thermosetting coating | Alesta® | External coating | External coating/ Wire Shelves | External coating | External coating | Microwaves Ovens/Radiators/ Cookers/ Hoods/ Hobs |
| Electro coating | AquaEC™ | Structures | Heat exchangers | Heat exchangers/ Structures | Structures | Compressors/ Radiators |
| Coil coating | Ceranamel™ | External coating | External coating | External coating | External coating | Ovens |

your needs!

**Plascoat® Applicat
Talisman**

AquaEC™

AquaEC™

AquaEC™

**Alesta®
Ceranamel™**

Alesta®

**Alesta®
Ceranamel™**

**Wireguard
Plascoat® NG30**

AquaEC™

Wireguard

Ceranamel™



WWW.AXALTA.COM

For questions please contact us via our websites:

Powder Coating Thermoplastic

www.axalta.com/thermoplastic

Powder Coating Thermosetting

www.axalta.com/powdercoatings-emea

Electrocoat

www.axalta.com/ecoat-emea

CeranameI™

www.axalta.com/ceranameI

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