Alesta® HR
Heatresistant HR Heat Resistant
HR30004021327 SSB 602S2

The product is a heat resistant powder coating, based on silicone, epoxy and acrylic resins. It is developed to be used for applications where a temperature up to 300°C is used for a short time period (the cycle time is 1 hour). To obtain maximum properties the coating needs a heat treatment up to the application temperature after curing. We recommend 30 minutes at 300°C.
To achieve an optimum result it is recommended to contact an Axalta representative for guidelines on using Alesta® HR in the best way.

Characteristics
- Matt Smooth
- Solid
- Corona

Usage Area
- Applications where a temperature up to 300°C is used for a short time period

Approvals
- This powder coating complies with the European Directives "Restriction of the use of certain hazardous substances" 2011/65/EU and 2015/863/EU (RoHS)

The following data has been obtained under laboratory conditions as described below. Actual product properties such as gloss, colour and finish may vary depending on application conditions.

Test Conditions

• Curing Conditions (object temperature)	12 min @ 210°C
• Substrate	0,8 mm Sweep blasted steel panels
• Film thickness EN ISO 2360	60± 10 µm

Physical Data

• Density calculated	1,7 g/cm³

Product Performance / Film Properties

Gloss @ 60° EN ISO 2813	35 ± 15
Adhesion EN ISO 2409	After 1 h @ 300°C: ≤ Gt 2

Note: Surface defects may be present after curing (craters, pinholes) but these will disappear after heat exposure at ≥300°C.

Curing Conditions (object temperature)

Can be cured using a variety of methods, e.g. IR, convection, combi ovens. In direct gas ovens, combustion by-products may cause significant colour changes (for specific advice, please contact us).

15-22 min @ 200°C
12-19 min @ 210°C
10-17 min @ 220°C

Storage Stability

12 months/25°C
Shelf life applies to materials stored in sealed plastic bags under dry and cool conditions.

Substrate Preparation

- Steel and aluminium substrates must be free of all contaminants that cannot be removed by the cleaning process. Best results are obtained when a strong, hot potassium hydroxide-based alkaline cleaner is used, followed by several rinse stages. The last rinse should be deionized water.
- Conversion coatings such as iron phosphate or zink phosphate are not recommended because of the disintegration of the metal phosphate films at high temperatures.
- The suitability of the surface preparation should be tested by the coater beforehand using appropriate test methods.

Application

- Do not mix this product with other powder coatings.
- Substrate should be correctly cleaned before use.
- Can be applied with manual or automatic guns.
- Film thickness: application settings will depend upon the geometry of the object being coated as well as the required film thickness. It is the responsibility of the applicator to make the appropriate adjustments.
- Recycling of the powder: possible up to 30 %.

Comments

- Certain chemicals or domestic cleaning products may cause damage to the appearance of the coating. We recommend testing a small inconspicuous area first to confirm suitability.
- Cleaning of the application equipment is done in a regular way by using a rubber scrape, vacuum cleaner and finely a wet rag. In filter box set-ups special caution is needed. To avoid contamination separate tubes and filter modules are recommended if feasible.
- Coated parts should be packed after they are fully cooled using suitable materials that are free of plasticizers.
- Packaged parts should be stored under cover to avoid the formation of condensation (for example under plastic wrapping film) which could result in permanent marks on the surface of the coating.
- Please contact us for specific questions.

Safety

Consult the Safety Data Sheet prior to use

The information provided herein corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since Axalta cannot anticipate all variations in actual end-use conditions Axalta makes no warranties and assumes no liability in connection with any of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.