

Technical data sheet

Date	: 10/16/2012
Product name	: Interpon ACE 600 HT
Product code	: WN304QF (Formerly 99-71003)
Color	: Black E12397 – Interpon ACE 600 HT
Product Description	: Interpon ACE 600 HT is a series of silicone based powder coatings developed for the agricultural and construction equipment market. These coatings provide corrosion protection and appearance integrity on components such as exhaust manifolds and mufflers that require extreme high heat temperatures up to 510°C / 950°F. Interpon ACE 600 HT is competitive with many established liquid coating technologies in even the most demanding of applications where heat resistance is required.

Powder properties

Type	: Silicone Polyester
Particle size	: Suitable for electrostatic spray
Gloss (Gardner 60°)	: 10%-20%
Specific gravity	: 1.99 +/-0.05 g/cm ³
Coverage at 1.0 mil	: 97 sq.ft/lb/mil
Storage conditions	: Dry cool conditions (<80°F, <25°C)
Shelf life	: 12 months, typical
Cure Schedule	: 15 minutes at 450° F (232° C)

Failure to observe the correct curing conditions may cause difference in color, gloss, loss of adhesion, and the deterioration of the coating properties.

Test Conditions

Substrate	: Aluminized Steel
Cure schedule	: 15 minutes at 450°F (232°C) (object temperature)
Film Thickness	: 50-75 µm is optimal; acceptable range for coating is 50-112 µm. Note that possible adhesion loss can occur at films >125 µm.
Testing condition	: The results shown above are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only. Actual product performance will depend upon the circumstances under which the product is used.

Mechanical tests

Elongation – Conical Mandrel	: ≤ 5 mm	ASTM D522
Adhesion	: ≥ 4B	ASTM D3359
Hardness (Gouge)	: ≥ 3H	ASTM D3363
Impact	: ≥ 40 Direct (in*lb)	ASTM D2794

Chemical tests

Salt spray	: 336 hours min; average creepback after scraping: < 3.0 mm	ASTM B117
Cyclical Corrosion	: 20 cycles – pass, no blisters and corrosion Average creepback after scraping: <1.0 mm	SAE J2334
Humidity Resistance	: No rust, no blisters, no gloss reduction after 336 hours	ASTM D2247
Thermal Exposure (510°C, 950°F) – 4 hrs	: Pass – Very slight fading	
Thermal Exposure w/Water Quench	: No cracking or adhesion loss	

Substrate pre-treatment

A multi-stage clean only process is recommended for optimum performance. Sandblasting improves adhesion and performance. Pretreatment system should be tested to verify performance.

Application

Interpon ACE 600 HT powders can be applied by manual or automatic electrostatic spray equipment. It is recommended that for consistent application and appearance the product be fluidized during application. Unused powder can be reclaimed using suitable equipment and recycled through the coating system. For more detailed information please contact an AkzoNobel technical service representative.

Safety Precautions

Please consult the Safety Datasheet (SDS).

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 Safety Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (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.

Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.