



COPY

Memorandum

To ProTech Nederland
From Eric Oude Spraakste
Date : March 29, 2002
Ref EOS
Copies to Bart Verheulen (ALN)
Subject : Accelerated durability test ProTech®

Introduction

ProTech® is a paint protection treatment that can be used on new and repaired paint systems. ProTech® claims to protect paint systems from weather influences such as UV light and acid rain. A test was performed to test the durability of ProTech® treated surfaces on a state of the art AKZO NOBEL car refinish basecoat/clearcoat system.

An AKZO NOBEL lab worker sprayed the panels and the ProTech® treatment was done by ProTech® self. All panels (included a control panel without ProTech® treatment) were tested for 3500 hours in a Weather-O-Meter. This accelerated test, known under ISO11341, is often used to screen outside durability in car refinish market. Gloss was measured according ISO 2813 every 500 hours.

Conclusions

ProTech® 500-2002 protects paint surface longer from UV light and keeps gloss at a higher level compared to untreated paint surface. ProTech® 500-2002 performs even better in this test then ProTech® 500-2001.

The panels treated with ProTech 5005-2002 maintain their gloss and protection and have in 4 years time a loss of only 3%.

The panels not treated with ProTech lose gloss and protection already after 2/3 years and then with 28%

Sofar we have not experienced any paint protection system/product which could realise these results. In time you even appreciate ProTech more as the paint remains nice and shiny. It is definitely the best result possible in this field.



Test set-up

Three aluminium panels were sprayed with a complete car refinish base-clear system by a AKZO NOBEL lab worker and build up as followed :

Primer : Autosurfacers 940 HS
 Basecoat : Autobase (light grey metallic)
 Clearcoat : Autoclear Vision

The primer was sanded after overnight drying at ambient temperature and directly recoated with basecoat (2 layers and mistcoat). After 15 minutes flash off the clearcoat was applied in a one-coat application. This clearcoat was cured for 10 minutes at 60°C. This is all according technical information sheets. Two panels were treated with ProTech® samples (500- and 500+) while one stayed untreated as control. ProTech® treatment was done by ProTech self.

All panels were exposed to UV light and humidity in a WOM test (ISO 11341) were gloss (ISO 2813) was followed for 3500 hours. This test varies UV and humid conditions in cycli. This test has a good correlation with outside durability in a shorter period. 2000 hours WOM test correlated with approximately 2 years Florida testing for such a technology.

Test results

The following results were obtained.

ProTech®	Hours	WOM test					
	0	619	1205	1789	2422	3042	3686
500+	83	85	86	86	86	83	81
500-	83	84	82	83	79	76	74
Control	84	84	82	82	75	71	60

