Test report on adhesion by dynamometric pull-off test

Applicant Company: **KEMICHAL srl, via dell'artigianato 2, Trebaseleghe (PD)**

Part concerning Sample

Sample's arrival:	05.10.2006
Tested Product:	**Mixed varnish system for parquets**
Painting system:	2 coats 120 g/m^2 basecoat PU143CNS, catalyzed 50% with C1370I + 1 coat 120 g/m^2 acrylic top-coat 1527 C15/20 gloss, catalyzed 20% with C1683.
Test support :	Venereed Juglans support
Samples (type and misures) :	Nr. 4 mm 50 x 64 x 7.
Surface:	Smooth, transparent

Reference Regulation	**UNI 9240**
Author	UNICHIM
Title:	Determination of Varnish adhesion on surface by pull-off test.

Part concerning Test

Date of test:	23.10.2006
Operators:	Enzo Morandi & Alessio Degli Innocenti
Lab temperature:	23°C / Humidity: 50%
Instrument:	Dynamometer ATS faar TC1000
Transom transfer speed	3 mm/min
Room Conditions:	Before starting test: 72 hours in atmosphere 23°C – 50% of humidity (ISO554)

Products and results

Name of sample	Ø head	Medium load N	Resistance to break MPa
Mixed varnish system for parquet	**22**	**355,2**	**0.935 Mpa**

Explanations In the most of cases the support (veneered panel) splits apart, instead the varnish detaches from substrate. This is due to the fact, that the interior resistance of panel is lower than the resistance between support and the applied varnishing product.