



Industrie Service

ATTESTATION

No. IS-AN5-MUC-1806-189187-001

for

SIMONA

Simona AG
Teichweg 16
55606 Kirn
Sites:
- Plant II
- Ringsheim

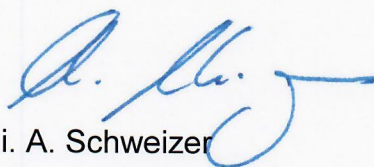
We hereby confirm that the plastics testing laboratories in Kirn and Ringsheim meet the requirements defined in the VdTÜV Guideline for the Assessment of Subcontractors, Edition 01/2001, for the test methods included in the list of test instructions with PA-Numbers, revision 6 of 29 August 2011.

The last assessment of the plastics testing laboratories in Kirn and Ringsheim is documented in the report with order number 602000061.

Valid to: This attestation is valid to November 2020.
Surveillance audits will be carried out at annual intervals.

Munich, 15 June 2018

TÜV SÜD Industrie Service GmbH
Institute for Plastics


i. A. Schweizer





List of test methods and equipment

Laboratory Kirn:

No.	Test / test method	PA-Nr.	Standard
K 01	Differential scanning calorimetry (DSC) incl. determination of oxidation induction time (OIT)	7.2.21	DIN EN ISO 11357-1 DIN EN 728
K 02	Methods for determining the density of non-cellular plastics	7.2.25	ISO 1183-1
K 03	Infrared spectroscopy	7.2.24	---
K 04	Microscopic analysis	7.2.22	---
K 05	Determination of the melt mass-flow rate (MFR)	7.2.18	DIN EN ISO 1133
K 06	Determination of water content by titration according to Karl Fischer	7.2.16	DIN 53715
K 07	Determination of carbon black content by calcination and pyrolysis	7.2.12	According to ISO 6964
K 08	Determination of Vicat softening temperature (VST)	7.2.42	DIN EN ISO 306
K 09	Determination of tensile properties in tensile test	7.2.14	DIN EN ISO 527-(1-3) ISO 6259-3 ISO 13953, Prüfk. A
K 10	Determination of indentation hardness by means of a durometer (shore hardness)	7.2.23	DIN EN ISO 868
K 11	Determination of Charpy impact properties	7.2.38	DIN EN ISO 179-1 DIN EN ISO 179-2
K 12	Dimensional changes after heat ageing	7.2.35	diverse (*)
K 13	Tensile creep test	7.2.7	DIN EN ISO 899-1
K 14	Determination of chemical resistance	7.2.31	DIN 16888 ISO 4433
K 15	Determination of flexural properties	7.2.39	DIN EN ISO 178
K 16	Determination of the adhesive shear strength	7.2.27	DIN 53769

(*) see SIMONA laboratory list test and working instructions

**Laboratory Ringsheim:**

Nr.	Prüfung / Prüfmethode	PA-Nr.	Standard
R 1	Determination of the resistance to internal pressure (long-term pressure test)	7.2.47	DIN EN ISO 1167
R 2	Determination of the melt mass-flow rate (MFR)	7.2.18	DIN EN ISO 1133
R 3	Determination of the longitudinal reversion	7.2.71	DIN EN ISO 2505
R 4	Determination of Charpy impact properties (Instrumented impact test)	7.2.72	DIN EN ISO 179-1 DIN EN ISO 179-2
R 5	Ultrasonic test	---	---

List of test methods, English
Rev. 6; 29.08.2011