



Industrie Service

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TÜV SÜD Industrie Service GmbH · 80684 München · Deutschland

Per E-Mail to: thorsten.spaeth@egeplast.de

egeplast international GmbH
Herr Dr. Späth
Robert-Bosch-Straße 7
48268 Greven

TÜV SÜD-certification of egeplast pipes made out of PE 100-RC according to PAS 1075

Dear Dr. Späth,

herby we can confirm that the egeplast pipes out of PE 100-RC are part of the TÜV SÜD-certification according to the standard PAS 1075 („Pipes made from Polyethylene for alternative installation techniques – Dimensions, technical requirements and testing“).

This TÜV SÜD-certification consists, among others, self-monitoring and external monitoring, with an initial inspection test (approval-test) and an annual monitoring test for each product/product group.

TÜV SÜD as the third party approval body for egeplast PE 100-RC pipes is conducting the necessary tests according to the requirements and frequency mentioned in the standard. Therefore, the TÜV SÜD is supported by approved and certified test labs.

According to PAS 1075 the third party certification as part of the approval tests for egeplast PE 100-RC pipes contains following details:

Datum: 12.10.2017

Unsere Zeichen:
IS-AN5-MUC/gr
egeplast-stellungnahme-PAS-gr-
12-10-17.doc

Dieses Dokument besteht aus
2 Seiten.
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Die auszugsweise Wiedergabe des Dokumentes und die Verwendung zu Werbezwecken bedürfen der schriftlichen Genehmigung der TÜV SÜD Industrie Service GmbH.

Die Prüfergebnisse beziehen sich ausschließlich auf die untersuchten Prüfgegenstände.



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Extract PAS 1075 - Table 3 – Testing of polyethylene piping for alternative installation methods and requirements:

No.:	Test	Requirements	Comments
1	Testing of the stress cracking behaviour	> 3,300 hours at 80 °C, 4 N/mm ² , 2 % Arkopal N- 100 (samples machined from the pipe)	2NCT per separate sample on smallest and largest wall thickness + diameter 110, SDR 11 over the cross section of the pipe
2	Point loading test	8,760 hours at 80 °C, 4 N/mm ² , 2 % Arkopal N- 100	3 separate samples, e.g. at 80°C and/or separate samples (diameter 110, SDR 11) chosen according to temperature as per mathematical model (e.g. Arrhenius)
3	Penetration test (simulation of a sharp fragment of a burstined cast iron pipe by 'GGZ', see annex A 4)	Remaining wall thickness after 9,000 hours > 50 % of the original wall thickness	Testing conditions as per MAC ³ concept taking into account the stress cracking resistance and the thermal aging

Furthermore the certification includes a re-testing procedure as quality monitoring of the pipes as follows:

Extract PAS 1075 - Table 4 – Quality control testing of the piping

No.:	Test	Requirements	Frequency	Comments
1	Pipe stress cracking test	>3,300 hours at 80 °C, 4 N/mm ² , 2 % Arkopal N- 100 or in correlated testing procedure ⁴ , e.g. 160 hours with ACT procedure (piping samples)	1 x per half year, but at least per manufactured group 1 x annually	2NCT and/or FNCT test on 3 separate samples (piping internal surface being included in the samples)
2	Point loading test	8,760 hours at 80 °C, 4 N/mm ² , 2 % Arkopal N- 100	Manufactured groups 1 and 2 annually, manufactured group 3 once in 3 years	80 °C separate samples

⁴ At least 30 test series in 3 decades are required to be tested in which the target value (e.g. 3,760 hours) is to be included. The correlation coefficient shall be > 0.9. The minimum requirement is to be demonstrated with a lower confidence limit of 2.3 %. The correlation is to be certified according to EN ISO/IEC 17025

The egeplast products including their related dimensions (e. g. nominal dimension from 25-1200 mm) and scope of application are published in the corresponding TÜV SÜD certificate, if the requirements according to PAS 1075 and additional TÜV SÜD specifications are met.

Institut for Plastics

i. A. Engel

The expert

Griebel