Zentrum für Konstruktionswerkstoffe
Staatliche Materialprüfungsanstalt Darmstadt
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TECHNISCHE UNIVERSITÄT DARMSTADT

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Test Report F 15 0533

1st copy

Client:	L´Isolante K-Flex S.p.A. Via Leonardo Da Vinci 36 I-20877 Roncello (MB) Italia
Order of:	2015/03/25 Party ordering/reference: ---
Subject of order:	Testing of acoustic insulation product with specification **„K-Fonic GV“** for contents of chlorine, fluorine, bromine and iodine in accordance with DIN VDE 0472 - section 815, issue 03-1989
Material tested:	A section of a grey resilient plastic sheet
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Sampling:	The test material was delivered by the costumer.
Samples received:	2015/03/26
Date of testing:	2015/03/30 till 2015/04/01
Sample whereabouts:	The test material will be disposed after six month.

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Werkstoffanalytik – Chemische Analytik
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Figures: ---
Attachments: ---

Date of the report: 2015/04/02 Reference: F/F5/Pu/Hl

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1 Object of the testing

The ratio of the halogen content -which is fluorine, chlorine, bromine and iodine- in an acoustic insulation material with the specification "**K-Fonik GV**" is to be determined as requested by the order in accordance with DIN VDE 0472 section 815 "Testing of cable and isolated lines", from the edition dated March 1989.

The following specimen material was delivered by the client for testing purposes: A section of a grey, resilient plastic sheet with a thickness of approximately 1,5 mm.

2 Performance of the testing

Parts of the sample were combusted in a digestion bomb filled with sodium peroxide (so called Wurzschmitt digestion). The combustion products were then dissolved in nitric acid or in acetic acid.

Afterwards the determination of the halogen contents in the obtained solutions was performed by means of spectrophotometric analysis according to DIN VDE 0472 section 815. Chlorine, bromine and iodine were determined according to section 3.1, type of testing "A", the content of fluorine was determined according to section 3.2, type of testing "B".

3 Results of the tests

The tests on the specimen material "**K-Fonic GV**" described under item 2 of the report resulted in the contents (based on the amount of insulation material weighed) set out in **Table 1**.

Table 1: Analysis results

Parameter	Content **K-Fonic GV**
Chlorine, bromine, iodine as chlorine	<0,02 % w/w
Fluorine	<0,001 % w/w

4 Evaluation of the test results

Halogen-free in the sense of the standard DIN VDE 0472 section 815 means that the mass fractions calculated for the halogens chlorine, bromine and iodine as chlorine are less than 0,2 % w/w and fluorine less than 0,1 % w/w.

These requirements are met by the examined sample "**K-Fonic GV**".