

Water-soluble chlorides and pH value according to EN 13468:2001

Test report No.: Q3-20-1083-01

Applicant: L'ISOLANTE K-FLEX S.p.A., 20877 RONCELLO (MB), Italy
Manufacturing plant: K-FLEX POLSKA Sp. z.o.o., 99-210 UNIEJOW, Poland
Name of product: K-FLEX ST
Declared density: ---
Product identification: Sheet made of flexible elastomeric foam (FEF) according to EN 14304:2009+A1:2013
 (as given by applicant) Colour: black
 Declaration of Performance No. 01040103212-CPR-16, dated 19.03.2019
 Declaration code: FEF-EN14304-ST(+)-85-ST(-)-165-MU10000-WS01-CL500-pH7±0,5
Sampling: In the plant on Dec 17, 2019 by staff of FIW München
Sample receipt: WE20-1014 on Jan 22, 2020 (internal No. 14)
Test equipment: Ion chromatograph according to EN ISO 10304-1:2009
Sample preparation: Samples were taken and prepared according to EN 13468:2001, sections 6 and 7.
 The test temperature was (90 ± 1) °C and the leaching time was 1.0 h.

Measured values: Test protocol No.: Q3-20-1083:0001:14

Int. No. Prod. date/code (Test date)	Declared thickness mm	Density kg/m ³	Mass concentration of chloride ions		Mass fraction chlorides in the insulant w		pH value	
			eluate b ₁ mg/l	sample b ₂ mg/l	single values mg/kg	mean value mg/kg	single values	mean value
14	32	55.4	5.516	0.000	294.2		8.3	
---			6.048	0.000	322.6	313.4	8.4	8.4
(May 14, 2020)			6.067	0.000	323.6		8.5	
Uncertainty: < 10 %			Mean value of the specimens:		313.4		8.4	

Mass fraction of chlorides in the insulant:

$$w = \frac{(b_1 - b_2) \cdot V}{m}$$

Key:

- w : Mass fraction of chlorides
- b₁ : Mass concentration of chlorid ions in the eluate
- b₂ : Mass concentration of chlorid ions in the blank sample
- V : Applied water volume for boiling out (0.40 l)
- m : Initial weight of sample (0.0075 kg)

Evaluation: The mean value of the chloride contents of the tested specimens is **313.4 mg/kg**.
 The mean value of the pH values of the tested specimens is **8.4**.

Remark: The requirement of the chloride content, stated in DOP No. 01040103212-CPR-16 (dated 19.03.2019), is met, as the content of water-soluble chlorides in the insulation material is less than 500 mg/kg. The requirement of the pH value is not met as it is higher than the declared 7±0,5.

Gräfelfing, May 28, 2020

Department Specialist:

Tester:

K. Wiesmeyer
 Dipl.-Ing. K. Wiesmeyer

S. Tana
 S. Tana



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