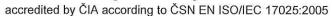


INSTITUT PRO TESTOVÁNÍ A CERTIFIKACI, a. s.

třída Tomáše Bati 299, Louky, 763 02 Zlín, Czech Republic

Testing Laboratory No. 1004





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ACCREDITED LABORATORY TEST REPORT ref.No. 412108422-01

Client:

Assco, s.r.o.

ID: 41186745

Address:

Vazová 2143, 688 01 Uherský Brod

Sample:

see sample description on page No. 2

Work requested:

Determination of overall migration

Determination of primary aromatic amines Determination of reducing substances

Proof of ammonium

Resistance to saliva and sweat

Determination of extractable heavy metals

Sample received on:

September 17, 2018

Report elaborated by:

Dipl. Ing. Dagmar Valeriánová

Place and date of issue:

Zlín, September 26, 2018

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Dipl. Ing. Jiří Samsonek, Ph.D. Head of Accredited Testing Laboratory



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2 ref. No. 412108422-01

Sample description and identification:

Table No.I Sample description and identification

ITC's identification number	Sample identification by client	Description of submitted sample		
412108422/01	EPDM granulate black			

Sampling method used:

The samples were supplied to the laboratory by the client. The laboratory is not responsible for mistakes caused by the wrong way of sampling.

Work requested:

Determination of selected parameters according to the requirements of Acta Hygienica Epidemiologica et Microbiologica (AHEM) 3/2000; Table 2 Basic criteria for evaluation of rubber products.

Testing method used:

- 1. Determination of overall migration according to the ČSN 62 1156, article12
- 2. Determination of primary aromatic amines according to the ITC internal regulation A -07 69
- 3. Determination of reducing substances according to the ČSN 62 1156, article 9
- 4. Proof of ammonium according to the ČSN 62 1156, article 17
- 5. Resistance to saliva and sweat, according to Annex 1 to Decree No. 84/2001 Coll.
- 6. Determination of extractable heavy metals (Cr, Cd, Co, Ni, Cu, Pb, As, Hg) by ICP-MS method according to the ITC internal regulation A-10-97

Testing conditions:

- ad 1. The deviation from the standard a migration area of 100 cm2 was determined only approximately because the sample was delivered crushed. The migration ratio 100 cm²/100 ml distilled water, 24 hours, temperature (37±1) °C
- ad 2.- 4. Tests were carried out in the extract: 8 g sample in 100 ml distilled water for 24 hours at (37±2) °C
- ad 5. Resistance to saliva and sweat was performed at a temperature (40±2) °C for 2 hours
- ad 6. Tests were carried out in the extract:10 g sample in 100 ml of artificial acidic sweat for 4 hours at (37±2)°C.

Note: The results given in this Test Report apply only to the sample tested by our laboratory!



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Test results:

The test results are given in the following table No. II:

Table No. II - sample 412108422/01 FPDM granulate black

Parameter	Unit	Value obtained ¹⁾	Uncertainty ²⁾	Limit value ³⁾	Interpretations
Primary aromatic amines	mg anilinhydrochl./l	< 0,05	-	max. 0,05	Compliance
Overall migration	mg/dm²	4,6	0,6	max. 10	Compliance
Reducing substances	ml/50 ml	22,9	1,4	max. 30	Compliance
Proof of ammonium	mg NH ₄ +/kg	< 2		max. 2	Compliance
The results of resistar	nce to saliva and	I sweat, according	to Annex 1 to	Decree No. 8	4/2001 Coll.
Resistance to sweat	-	resistant	-	resistant	Compliance
Resistance to saliva	-	resistant	-	resistant	Compliance
The content o	f extractable me	tals in acidic sweat	t, related to th	e product wei	ght
As content	mg/kg	< 0,10		max. 0,2	Compliance
Pb content	mg/kg	< 0,20	-	max. 0,2	Compliance
Cd content	mg/kg	< 0,10	-	max. 0,1	Compliance
Hg content	mg/kg	< 0,02	-	max. 0,02	Compliance
Cr content	mg/kg	< 0,10	-	max. 1,0	Compliance
Co content	mg/kg	< 0,10	-	max. 1,0	Compliance
Cu content	mg/kg	< 0,10		max. 25,0	Compliance
Ni content	mg/kg	< 0,10	-	max. 1,0	Compliance

Notes to the table No. II:

Symbol ,,< " means limit of detection of used analytical method.

The uncertainty is expressed as the expanded uncertainty with a coverage factor of k=2, with a confidence level of 95%

3) Limit values according to the AHEM 3/2000; Table No. 2 Basic criteria for evaluation of rubber products

Evaluated by:

Dipl. Ing. Dagmar Valeriánová

Dipl. Ing. Věra Vilímková

Laboratory of analytical chemistry and microbiology

Note: The results given in this Test Report apply only to the sample tested by our laboratory!