

TEST REPORT SR 0083/22

Client: Cofrag Indústria e Comércio Ltda.

Address: 309, General Nascimento Vargas Street, Sapiranga – RS – Brazil.

1 - Sample description: One (01) sample of black coloured foam.

Client identification: “Espuma PU GCF 120/25 Preto. Bloco: 82735”.

2 - Sample description: One (01) sample of white coloured foam.

Client identification: “Espuma PU GCF 120/25 Off White. Bloco: 84880”.

3 - Sample description: One (01) sample of gray coloured foam.

Client identification: “Espuma D 58 Cinza. Bloco: 50122”.



Application: 59939

Date of entry: 12/16/2021

Date of the test: 12/18/2021 until 01/14/2022.

TESTS AND RESULTS

Determination of Bisphenol A (BPA) (US EPA 3550C: 2007 & US EPA 8321B: 2007)¹

Sample	Results (ppm)	Orientation (Manual Veja 2021)	Evaluation
1 + 2 + 3	< LQM	Maximum: 1 ppm	PASS

Nonylphenol (NP), Octylphenol (OP), Nonylphenol Ethoxylates (NPEO/OPEO) (EN ISO 18254-1:2016)¹

Sample	Results (ppm)	Orientation (Manual Veja 2021)	Evaluation
1 + 2 + 3	< LQM	Sum of NP and OP: Maximum: 100 ppm Sum of NPEO and OPEO: Maximum: 100 ppm	PASS

Determination of phthalate content (CPSC-CH-C 1001-09.3/2018)*

Sample	Results (%)	Orientation (Manual Veja 2021)	Evaluation
1 + 2 + 3	DIBP = 0.025 Total = 0.025	Maximum: 500 ppm each Total: Maximum: 1000 ppm	PASS

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Determination of organotin compounds (ISO/TS 16179:2012)

Sample	Results (ppm)	Orientation (Manual Veja 2021)	Evaluation
1 + 2 + 3	< LQM	DBT, DOT, MBT, TCyHT, TMT: 1 ppm each TPhT: 0.5 ppm TBT: 0.1 ppm	PASS

Determination of polycyclic aromatic hydrocarbons (PAHs) (ISO 16190/13)

Sample	Results (ppm)	Orientation (Manual Veja 2021)	Evaluation
1 + 2 + 3	< LQM	Total: 10 ppm	PASS

Determination of metal content

Part 1: Determination of metals using microwave digestion (BS EN 16711-1:2015)

Analysis performed by ICP-OES

Sample	Results (ppm)	Orientation (Manual Veja 2021)	Evaluation
1 + 2 + 3	Cd = < LQM	40 ppm	PASS
	Pb = < LQM	90 ppm	PASS
	As = < LQM	10 ppm	PASS
	Hg = < LQM	0.5 ppm	PASS

Determination of DMFa, DMAC, NMP e Formamide (ISO 16189/13)

Sample	Results (ppm)	Orientation (Manual Veja 2021)	Evaluation
1 + 2 + 3	< LQM	DMFa: Maximum 500 ppm Others: Maximum 1000 ppm	PASS

Method Quantification Limit – LQM

- Phthalates: 0.015 %

Dimethyl phthalate (DMP)	Di-n-hexyl phthalate (DNHP)	Methyl butyl phthalate (MBP)
Di-(2-ethyl-hexyl) phthalate (DEHP)	Butyl benzyl phthalate (BBP)	Di-n-pentyl phthalate (DPP)
Diisobutyl phthalate (DIBP)	Diisodecyl phthalate (DIDP)	Diisooctyl phthalate (DIOP)
Dibutyl phthalate (DBP)	Diethyl phthalate (DEP)	Bis(2-methoxyethyl) phthalate (BMEP)
Diisooheptyl phthalate (DIHP)	Diisononyl phthalate (DINP)	Dipropyl phthalate (DPrP)
Dicyclohexyl phthalate (DCHP)	Di-n-octyl phthalate (DNOP)	Diisopentyl phthalate (DIPP)
N-pentyl-isopentyl phthalate (PiPP)		
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear		
1,2-benzenedicarboxylic acid, dipentylester, branched and linear		
1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)		
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)		

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Method Quantification Limit – LQM		
-PAHs (ppm): 0.5 ppm		
Naphthalene	Benzo[e]pyrene	
Acenaphthylene	Benzo[j]fluoranthene	
Acenaphthene	Chrysene	
Fluorene	Benzo[b]fluoranthene	
Phenanthrene	Benzo[k]fluoranthene	
Anthracene	Benzo[a]pyrene	
Fluoranthene	Indeno[1,2,3-cd]pyrene	
Pyrene	Dibenzo[a,h]anthracene	
Benzo[a]anthracene	Benzo[g,h,i]perylene	
- Alkyl Phenol (ppm):		
NP/ OP: 10 ppm	OPEO/ NPEO: 50 ppm	
- Bisphenol A: 1.0 ppm		
- BS EN 16711-1 (Total):		
Lead (Pb): 10.0 ppm	Cadmium (Cd): 10.0 ppm	Mercury (Hg): 0.5 ppm
Arsenic (As): 10.0 ppm		
Solvents and Residuals (ppm):		
Dimethylformamide (DMFa): 10	N – methyl – 2 – pyrrolidone (NMP): 10	
Dimethylacetamide (DMAC): 10	Formamide: 10	
- Organotin: 0.2 ppm		
n-butyltin (MBT)	Monooctyltin (MOT)	Trimethyltin (TMT)
tributyltin (TBT)	Di-n-octyltin (DOT)	Tricyclohexyltin (TCyHT)
Dibutyltin (DBT)	Triphenyltin (TPHT)	Trioctyltin (TOT)
Tetrabutyltin (TeBT)	Tripropyltin (TPT)	

¹This test has been outsourced:

Enterprise: Centre Testing International Group Co., Ltd.
Address: Liuxian 3rd Road, Xin'an Street, Bao'an District, Shenzhen, P.R. China.
Document: A2210538200120
Date: 01/02 a 01/07/2022.

Considerations:

ppm (parts per million) = mg/kg

Sampling was carried by client.

With the exception of the outsourced tests, the remaining tests were performed in the laboratory permanent facilities.

At the customer's request, the samples grouped. In case of a positive result, IBTeC recommends testing each separate sample.

With no further information for the time being, we now issue the present report.

This report integrates the sheet of signatures attached.

Novo Hamburgo, January 18th, 2022.

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Phone +55 51 3553.1000
www.ibtec.org.br
laudos@ibtec.org.br
CNPJ 87.190.161/0001-73
Inscrição Estadual: 086/0422534

Rua Araxá, 750
Bairro Ideal
93334-000
Novo Hamburgo
Rio Grande do Sul, Brasil

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Aline Luana Ghiggi

Technical Analyst
Aline Luana Ghiggi - Chemical technician
CRQ 05409348 - 5ª Region

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Jaqueline Roese

Technical Analyst
Jaqueline Roese - Chemical technician
CRQ 05409456 - 5ª Region

Monique Sipp

Technical Analyst
Monique Sipp - Chemical technician
CRQ 054010356 - 5ª Region

Janiela C. Klein Gamarra

Test Supervisor
Janiela Cristina Klein Gamarra - Industrial Chemist
CRQ 05203543 - 5ª Region

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