

## TEST REPORT SR 4064/21

**Client:** Calçados Ramarim Ltda.

**Address:** 171, Angra dos Reis Street, Nova Hartz – RS – Brazil.

**1 - Sample description:** One (01) sample of yellow colored pigment in granules.

**Client identification:** “Neotech Amarelo Vivo 12108”.

**2 - Sample description:** One (01) sample of red colored pigment in granules.

**Client identification:** “CHR 9136 Vermelho”.

**3 - Sample description:** One (01) sample of black colored pigment in granules.

**Client identification:** “CHR 7790”.



**Application:** 59407

**Date of entry:** 11/22/2021

**Date of the test:** 11/24 until 12/13/2021.

### TESTS AND RESULTS

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

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

#### 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

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### Determination of Nonylphenol (NP) and Octylphenol (OP) (EN ISO 21084: 2019)<sup>1</sup>

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

### Determination of polycyclic aromatic hydrocarbons (PAHs) (AfPS GS 2014:01 PAK)

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

#### Method Quantification Limit – LQM

<b>- Phthalates: 0.015 %</b>		
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)
Diisoheptyl 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)		
<b>- Organotin: 0.2 ppm</b>		
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)	

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Method Quantification Limit – LQM	
<b>-PAHs (ppm): 0.5 ppm</b>	
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
<b>- Alkyl Phenol (ppm):</b>	
NP/ OP: 10 ppm	
<b>- BS EN 16711-1 (Total):</b>	
Lead (Pb): 10.0 ppm	Cadmium (Cd): 10.0 ppm
Arsenic (As): 10.0 ppm	Mercury (Hg): 0.5 ppm

**<sup>1</sup>This test has been outsourced:**

**Enterprise:** Centre Testing International Group Co., Ltd.  
**Address:** Liuxian 3<sup>rd</sup> Road, Xin'an Street, Bao'an District, Shenzhen, P.R. China.  
**Document:** A2210442861184  
**Date:** 12/01 a 12/03/2021.

**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 were grouped. In case of a positive result, IBTeC recommends testing each separate sample.

\* This test is accredited by CPSC.

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

This report integrates the sheet of signatures attached.

Novo Hamburgo, December 13<sup>th</sup>, 2021.

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## TEST REPORT SR 4064/21

*Aline Luana Ghiggi*

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