Chemical Analysis Laboratory	Technical Report	Service Order	Page
	Nº 6444/21	Nº 2821/21	Nº 1/7

Requirer: CBC COUROS E ACABAMENTOS LTDA.
Address: Est Leopoldo Petry, 255 – Novo Hamburgo – RS.
Date of receipt of sample: 12/14/2021.
Sample characterization: 01 sample of leather, identified by the customer as: "EASY (COURO ACABADO COM COBERTURA) LOTE: BRITTANY (OS: 753) + EASY (COURO ACABADO COM COBERTURA) LOTE INDIGO (OS: 770/831) EASY (COURO ACABADO COM COBERTURA) LOTE: CELESTE (OS: 842/1028)".
Selection of samples: up to the requirer.
Sampling: up to the laboratory.

TEST	RESULTS				
	Results	MQL	Unit	Method	Evaluation
1 – AZO Amines	<5.0	5.0	mg/kg	ISO 14362-1:2017 and ISO 14362-3:2017	Pass
2 – Total Lead	<2.0	2.0	mg/kg	CPSC-CH-E1002-08.3 (2012)	Pass
3 – Total Arsenic	<2.0	2.0	mg/kg	ABNT NBR ISO 17072-2:2015	Pass
4 – Total Mercury	<0.10	0.10	mg/kg	ABNT NBR ISO 17072-2:2015	Pass
5 – Total Cadmium	<2.0	2.0	mg/kg	ABNT NBR ISO 17072-2:2015	Pass
6 – Polyaromatic Hydrocarbons – PAHs	<0.20	0.20	mg/kg	AFPS-GS-2019-01-PAK	Pass
7 – Soluble Nickel	0.14	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
8 – Soluble Mercury	<0.005	0.005	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
9 – Soluble Copper	<0.05	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
10 – Soluble Cobalt	<0.05	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
11 – Soluble Lead	<0.05	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
12 – Soluble Barium	0.11	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass

Instituto SENAI de Tecnologia em Couro e Meio Ambiente
Rua Gregório de Mattos,111 – Centro – Estância Velha/RS
(51) 3904-2735 | laboratorios.couro@senairs.org.br | institutossenai.org.br

TEST	RESULTS				
	Results	MQL	Unit	Method	Evaluation
13 – Soluble Cadmium	<0.05	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
14 – Soluble Arsenic	<0.05	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
15 – Soluble Selenium	<0.05	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
16 – Soluble Antimony	<0.05	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
17 – Soluble Chromium	1.21	0.05	mg/kg	ABNT NBR ISO 17072-1:2015	Pass
18 – Phtalates	<50	50	mg/kg	CPSC-CHC1001-09.4(2018)	Pass
19 – Residual Solvents	468	10	mg/kg	ISO/TS 16189:2013	Pass
20 – Organotin	<0.10	0.10	mg/kg	ABNT ISO/TS 16179:2017	Pass

Note 1: Evaluation according to Veja Limits – Maximum Allowed Limits according VEJA Restricted Substances Policy – September/2021.

Note 2: mg/kg = ppm
Note 3: MQL = Method Quantification Limit.
Note 3: Results expressed on a dry basis.

Instituto SENAI de Tecnologia em Couro e Meio Ambiente
Rua Gregório de Mattos,111 – Centro – Estância Velha/RS
(51) 3904-2735 | laboratorios.couro@senairs.org.br | institutossenai.org.br

Results by Compounds:

Azo-amines	**CAS Number**	**Results**	**VEJA Limits** (Maximum allowable concentration)	**Laboratory Limits** (Method quantification limit)
4-Aminobiphenyl	92-67-1	<5.0	20 ppm (each)	5.0 ppm (each)
Benzidine	92-87-5	<5.0		
4-Chlor-o-toluidine	95-69-2	<5.0		
2-Naphthylamine	91-59-8	<5.0		
o-Aminoazotoluene	97-56-3	<5.0		
2-Amino-4-nitrotoluene	99-55-8	<5.0		
p-Chloraniline	106-47-8	<5.0		
2,4-Diaminoanisole	615-05-4	<5.0		
4,4’-Diaminodiphenylmethane	101-77-9	<5.0		
3,3’-Dichlorobenzidine	91-94-1	<5.0		
3,3’-Dimethoxybenzidine	119-90-4	<5.0		
3,3’-Dimethylbenzidine	119-93-7	<5.0		
3,3’-Dimethyl-4,4’-diaminodiphenylmethane	838-88-0	<5.0		
p-Cresidine	120-71-8	<5.0		
4,4’-Methylen-bis(2-chloraniline)	101-14-4	<5.0		
4,4’-Oxydianiline	101-80-4	<5.0		
4,4’-Thiodianiline	139-65-1	<5.0		
o-Toluidine	95-53-4	<5.0		
2,4-Toluylenediamine	95-80-7	<5.0		
2,4,5-Trimethylaniline	137-17-7	<5.0		
2,4 Xylidine	95-68-1	<5.0		
2,6 Xylidine	87-62-7	<5.0		
2-Methoxyaniline (= o-Anisidine)	90-04-0	<5.0		
p-Aminoazobenzene	60-09-3	<5.0		
4-Chloro-o-toluidinium Chloride	3165-93-3	<5.0		
2-Naphthylammoniumacetate	553-00-4	<5.0		
4-Methoxy-m-phenylene Diammonium Sulphate	39156-41-7	<5.0		
2,4,5-trimethylaniline hydrochloride	21436-97-5	<5.0		

Heavy Metals	CAS Number	Results	VEJA Limits (Maximum allowable concentration)	Laboratory Limits (Method quantification limit)
Antimony (Sb)	7440-36-0	<0.05	**Extracted:** 30 ppm	**Extracted:** 0.05 ppm
Arsenic (As)	7440-38-2	<0.05	**Extracted:** 0,1 ppm	**Extracted:** 0.05 ppm
		<2.0	**Total:** 10 ppm	**Total:** 3.5 ppm Leather: 2.0 ppm
Barium (Ba)	7440-39-3	0.11	**Extracted:** 1000 ppm	**Extracted:** 0.05 ppm
Cadmium (Cd)	7440-43-9	<0.05	**Extracted:** 0.1 ppm	**Extracted:** 0.05 ppm
		<2.0	**Total:** 40 ppm	**Total:** 3.5 ppm Leather: 2.0 ppm
Cobalt (Co)	7440-48-4	<0.05	**Extracted:** 1 ppm	**Extracted:** 0.05 ppm
Copper (Cu)	7440-50-8	<0.05	**Extracted:** 25 ppm	**Extracted:** 0.05 ppm
Chromium (Cr)	7440-47-3	1.21	**Extracted:** Textiles:2 ppm Leather: 60 ppm	**Extracted:** 0.05 ppm
Lead (Pb)	7439-92-1	<0.05	**Extracted:** 0.2 ppm	**Extracted:** 0.05 ppm
		<2.0	**Total:** 90 ppm	**Total:** 3.5 ppm Leather: 2.0 ppm
Mercury (Hg)	7439-97-6	<0.005	**Extracted:** 0.02 ppm	**Extracted:** 0.005 ppm
		<0.10	**Total:** 0.5 ppm	**Total:** 0.1 ppm
Nickel (Ni)	7440-02-0	0.14	**Extracted:** 1 ppm	**Extracted:** 0.05 ppm
Selenium (Se)	7782-49-2	<0.05	**Extracted:** 500 ppm	**Extracted:** 0.05 ppm

Instituto SENAI de Tecnologia em Couro e Meio Ambiente
Rua Gregório de Mattos,111 – Centro – Estância Velha/RS
(51) 3904-2735 | laboratorios.couro@senairs.org.br | institutossenai.org.br

Phthalates	**CAS Number**	**Results**	**VEJA Limits** (Maximum allowable concentration)	**Laboratory Limits** (Method quantification limit)
Di-isononylphthalate (DINP)	28553-12-0	<50	Total: 1000 ppm 500 ppm (each)	50 ppm (each)
Di-n-octylphthalate (DNOP)	117-84-0	<50		
Di(2-ethylhexyl)-phthalate (DEHP)	117-81-7	<50		
Diisodecylphthalate (DIDP)	26761-40-0	<50		
Butylbenzylphthalate (BBP)	85-68-7	<50		
Dibutylphthalate (DBP)	84-74-2	<50		
Diisobutylphthalate (DIBP)	84-69-5	<50		
Di-n-hexylphthalate (DnHP)	84-75-3	<50		
Diethylphthalate (DEP)	84-66-2	<50		
Dimethylphthalate (DMP)	131-11-3	<50		
Di-n-pentyl phthalate (DPENP)	131-18-0	<50		
Dicyclohexyl phthalate (DCHP)	84-61-7	<50		
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	<50		
Bis(2-methoxyethyl) phthalate	117-82-8	<50		
Diisopentyl phthalate (DIPP)	605-50-5	<50		
Dipropyl phthalate (DPRP)	131-16-8	<50		
Diisooctyl phthalate (DIOP)	27554-26-3	<50		
Diisoexyl phthalate (DIHxP)	71850-09-4	<50		
Di-hexyl phthalate, branched and linear (DHxP)	68515-50-4	<50		
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	<50		
1,2-Benzenedicarboxylic acid	84777-06-0	<50		
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate; 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters; 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters	68648-93-1 68515-51-5	<50		
n-Pentyl-isopentylphthalate (nPIPP)	776297-69-9	<50		

Polycyclic Aromatic Hydrocarbons (PAHs)	**CAS Number**	**Results**	**VEJA Limits** (Maximum allowable concentration)		**Laboratory Limits** (Method quantification limit)
Acenaphtene	83-32-9	<0.20	No individual restriction	Total: 10 ppm	0.20 ppm
Acenaphthylene	208-96-8	<0.20			
Anthracene	120-12-7	<0.20			
Benzo(g,h,i)perylene	191-24-2	<0.20			
Fluorene	86-73-7	<0.20			
Fluoranthene	206-44-0	<0.20			
Indeno(1,2,3-cd) pyrene	193-39-5	<0.20			
Naphthalene	91-20-3	<0.20			
Phenanthrene	85-01-8	<0.20			
Pyrene	129-00-0	<0.20			
Benzo(a)anthracene	56-55-3	<0.20			
Benzo(a)pyrene	50-32-8	<0.20	0.5 ppm (each)		
Benzo(b)fluoranthene	205-99-2	<0.20			
Benzo[e]pyrene	192-97-2	<0.20			
Benzo[j]fluoranthene	205-82-3	<0.20			
Benzo(k)fluoranthene	207-08-9	<0.20			
Chrysene	218-01-9	<0.20			
Dibenzo(a,h)anthracene	53-70-3	<0.20			

Solvents/Residuals	**CAS Number**	**Results**	**VEJA Limits** (Maximum allowable concentration)	**Laboratory Limits** (Method quantification limit)
Dimethylformamide (DMFa)	68-12-2	23.1	500 ppm	10 ppm
Formamide	75-12-7	<10	1000 ppm (each)	
Dimethylacetamide (DMAC)	127-19-5	445		
N-Methyl-2-pyrrolidone (NMP)	872-50-4	<10		

Organotin Compouds	CAS Number	Results	VEJA Limits (Maximum allowable concentration)	Laboratory Limits (Method quantification limit)
Dibutyltin (DBT)	Several	<0.10	1 ppm (each)	0.10 ppm
Dioctyltin (DOT)	Several	<0.10		
Monobutyltin (MBT)	Several	<0.10		
Tricyclohexyltin (TCyHT)	Several	<0.10		
Trimethyltin (TMT)	Several	<0.10		
Trioctyltin (TOT)	Several	<0.10		
Tripropyltin (TPT)	Several	<0.10		
Triphenyltin (TPhT)	Several	<0.10	0.50 ppm	
Tributyltin (TBT)	Several	<0.10	0.10 ppm	

EXAMINATION PERFORMED: 12/14/2021 to 01/14/2022.

TRACKING EQUIPMENT USED FOR TEST:

- NI 102 Balance, with calibration certificate RBC 006060/2021 emitted by INSTITUTO SENAI DE INOVAÇÃO EM METALMECÂNICA-CETEMP and valid until 05/2023.

Estância Velha, January 19th, 2022.

LUCAS ZOLDAN:00204290023

Assinado de forma digital por LUCAS ZOLDAN:00204290023
Dados: 2022.01.19 16:52:20 -03'00'

Technical Analyst
Lucas Zoldan
CRQ 05202050

Revision 00
LBS