

## Test Report

**Customer:** Rutland Plastic Technologies Inc.  
10021 Rodney Street  
28134 Pineville - North Carolina  
United States

**Contact Person:** Mr. Tony Chapman  
**Customer Reference:** PADE/MIXE/PTHF

**Report No.:** (25418)067-386000

**Report Version:** 1  
**Date of Reception:** 26.02.2018  
**Report Date:** 08.03.2018

**Date of Order:** 22.02.2018  
**Sampled By:** client

### Sample Information

**Testing Requirements:** Tested according to "ordered" requirements  
**Sample Description:** EF WHITES; Mixture Wet Plastisol Ink

**Performance Date:** 26.02.2018 - 08.03.2018

**No. of workdays:** 8

### Submitted Samples

Nr. 1



**Summary of Test Results**  
Tested according to "ordered" requirements

Tests required	Conclusion	Remark
Heavy metals, total content	Pass	
Heavy metals in surface coatings, total content	Pass	
Phthalates (CPSIA)	Pass	
Phthalates	Pass	

Please note that we dried the sample at 160°C for 1 minute.

### Tested Samples

Article No	Sample ID	Sample description
	386000-01	1) Print offwhite on fabric white

### Test Results

Tested according to "ordered" requirements


Sample Description:		1) Print offwhite on fabric white		Lab Reference No:	386000-01
<b>Test Method / Standard:</b>		Phthalates: DIN EN ISO 14389 (modified), extraction with THF/ACN followed by GC-MS and/or LC-MS analysis, reporting limit: 50 mg/kg			
<b>Test Location:</b>		Parameter has been analyzed at BVCPS laboratory Schwerin.			
Parameter	Limit	Result	Rating		
Phthalates	≤ 1000 mg/kg	not detected	Pass		
<b>Test Method / Standard:</b>		Phthalates (CPSIA): CPSC-CH-C1001-09.3 (modified) - (CPSIA), reporting limit: 50 mg/kg			
<b>Test Location:</b>		Parameter has been analyzed at BVCPS laboratory Schwerin.			
Parameter	Limit	Result	Rating		
Di(2-ethylhexyl)phthalates (DEHP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
Dibutylphthalates (DBP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
Benzylbutylphthalate (BBP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
Di-iso-nonylphthalates (DINP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
Di-iso-decylphthalates (DIDP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
Di-n-octylphthalates (DNOP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
Di-n-hexylphthalate (DnHP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (Di-n-pentylphthalate, DnPP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
Dicyclohexylphthalate (DCHP)	≤ 1000 mg/kg	<50 mg/kg	Pass		
<b>Test Method / Standard:</b>		Heavy metals, total content: Microwave digestion with salpetric acid/hydrochloric acid followed by ICP analysis			
<b>Test Location:</b>		Parameter has been analyzed at BVCPS laboratory Schwerin.			
Parameter	Limit	Result	Rating		
Arsenic (As)	≤ 100 mg/kg	<1 mg/kg	Pass		
Cadmium (Cd)	≤ 75 mg/kg	<1 mg/kg	Pass		
Lead (Pb)	≤ 90 mg/kg	<1 mg/kg	Pass		
Mercury (Hg)	≤ 0.5 mg/kg	<0.1 mg/kg	Pass		
Tin (Sn)		0.235 mg/kg	No Specification		
<b>Test Method / Standard:</b>		Heavy metals in surface coatings, total content: CPSC-CH-E-1003-9 modified, CPSD-AN-00001-MTHD			
<b>Test Location:</b>		Parameter has been analyzed at BVCPS laboratory Schwerin.			
Parameter	Limit	Result	Rating		
Arsenic (As)	≤ 100 mg/kg	<1 mg/kg	Pass		
Cadmium (Cd)	≤ 75 mg/kg	<1 mg/kg	Pass		
Lead (Pb)	≤ 90 mg/kg	<1 mg/kg	Pass		
Mercury (Hg)	≤ 0.5 mg/kg	<0.1 mg/kg	Pass		
Tin (Sn)		0.235 mg/kg	No Specification		

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The test result relates only to the tested item. Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced. Tests not covered by the laboratory's testing spectrum may be subcontracted to an accredited laboratory. The accreditation relates to competences stated on the accreditation certificate. If nothing else has been agreed on samples are stored for 3 months. All tested parameters are listed in the appendix.

The testing of mixed samples is carried out at the customer's explicit request and may imply a deviation from the testing standard. Please note the following: results for mixed samples that are below the limit may exceed the limit if the samples contained in the mixed sample are tested individually. In these cases separate testing of the samples is recommended.

**Performance Date:** 26.02.2018 - 08.03.2018

**Total Run Time:** 8



Ute Freyermann  
Analytical Testing Specialist

**No results printed beyond this point in the report**

### Detailed Method Descriptions

<b>Analysis / Test:</b>	Heavy metals in surface coatings, total content
CPSC-CH-E-1001-8.1 modified, CPSC-CH-E-1002-8.1 modified, CPSC-AN-00066-MTHD, CPSC-AN-00164-MTHD	
<b>Analysis / Test:</b>	Phthalates (CPSIA)
CPSIA Sec.108, 101 (a)(2), test method: CPSC-CH-C1001-09.3 (modified) - (CPSIA), GC-MS analysis; reporting limit: 50 mg/kg.	

### Parameters & CAS No.

Heavy metals, total content	(CAS No.)
Lead (Pb) (7439-92-1)	
Mercury (Hg) (7439-97-6)	
Tin (Sn) (7440-31-5)	
Arsenic (As) (7440-38-2)	
Cadmium (Cd) (7440-43-9)	
Heavy metals in surface coatings, total content	(CAS No.)
Lead (Pb) (7439-92-1)	
Mercury (Hg) (7439-97-6)	
Tin (Sn) (7440-31-5)	
Arsenic (As) (7440-38-2)	
Cadmium (Cd) (7440-43-9)	
Phthalates (CPSIA)	(CAS No.)
Di(2-ethylhexyl)phthalates (DEHP) (117-81-7)	
Di-n-octylphthalates (DNOP) (117-84-0)	
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (Di-n-pentylphthalate, DnPP) (131-18-0)	
Di-iso-decylphthalates (DIDP) (26761-40-0)	
Di-iso-nonylphthalates (DINP) (28553-12-0)	
Dicyclohexylphthalate (DCHP) (84-61-7)	
Dibutylphthalates (DBP) (84-74-2)	
Di-n-hexylphthalate (DnHP) (84-75-3)	
Benzylbutylphthalate (BBP) (85-68-7)	
Phthalates	(CAS No.)
Di(2-ethylhexyl)phthalate (DEHP) (117-81-7)	
Bis(2-methoxyethyl) phthalate (DMEP) (117-82-8)	
Di-n-octylphthalate (DNOP) (117-84-0)	
Di-iso-decylphthalate (DIDP) (26761-40-0)	
Di-iso-nonylphthalate (DINP) (28553-12-0)	
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) -> determined as Diundecylphthalate (68515-42-4, 3648-20-2)	
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) (71888-89-6)	
Di-iso-butylphthalate (DIBP) (84-69-5)	
Dibutylphthalate (DBP) (84-74-2)	
Di-n-hexyl phthalate (DnHP) (84-75-3)	
Benzylbutylphthalate (BBP) (85-68-7)	