

Flashbay Electronics  
Building2, Jixun Industrial Park, Xinjiao, Dong'ao  
Village, Shatian Town, Huiyang District, Huizhou  
City, Guangdong Province, P.R.China

**DEKRA Testing and Certification  
(Shanghai) Ltd., Guangzhou Branch**  
Block 5, No.3, Qiyun Road, Huangpu  
District, Guangzhou, Guangdong, China  
Tel.: +86 20 6661 2000  
Fax: +86 20 6661 2001

Contact  
Devin Ai  
Tel.: +86 20 6684 3294  
E-Mail: devin.ai@dekra.com  
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# TEST REPORT

**Test Report No.** : **4393785.55** Version 1




**Project No.** : **4393785.00**

**Test report date** : **2022-09-22**

Job No. : 22-02884  
Applicant : Flashbay Electronics  
Building2, Jixun Industrial Park, Xinjiao, Dong'ao Village, Shatian  
Town, Huiyang District, Huizhou City, Guangdong Province, P.R.China  
Product Name : Pen Series  
Model No. : Essence(ESS),Contour(CNT)Ridge(RID)  
Test Requested : 1) Toxic Substances Control Act  
- 2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP)  
2) Toxic Substances Control Act  
- Pentachlorothiophenol (PCTP)  
3) Toxic Substances Control Act  
- Hexachlorobutadiene (HCBd)  
4) Toxic Substances Control Act  
- Decabromobiphenylether (decaBDE)  
5) Toxic Substances Control Act  
- Phenol, isopropylated phosphate (PIP(3:1))  
Test Method : Please refer to next pages  
Sample Received : 2022-08-16,2022-09-06  
Testing Period : 2022-08-16 to 2022-09-21

Test Results  
- following pages -

**Resume:**

<b>Parameter</b>	<b>Sample photo:</b>	
		
		<b>BLANK</b>
2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP)	PASS	
Pentachlorothiophenol (PCTP)	PASS	
Hexachlorobutadiene (HCBd)	PASS	
Decabromobiphenylether (decaBDE)	PASS	
Phenol, isopropylated phosphate (PIP(3:1))	PASS	

Guangzhou, September 22, 2022

Signed for and on behalf of

**DEKRA Testing and Certification (Shanghai) Ltd., Guangzhou branch**

Chemical & Mechanical



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Devin Ai  
Assistant Manager

Attention: Please note that every statement made in this report is only valid for the samples tested and reported herein. This report shall not be reproduced except in full, without the written approval of the testing laboratory.

**TESTED COMPONENTS:**

- (1) White plastic (pen)
- (2) Transparent coating (Wood)
- (3) Yellow wood (body)
- (4) Silver plastic (pen)
- (5) White plastic (Refill middle)
- (6) Beige plastic (refill top)
- (7) Blue-purple ink (Inside the refill)
- (8) Blue plastic (Outside the pen)
- (9) Grey plastic (Blue/silver pen interior)
- (10) Red plastic (Outside the pen)
- (11) Black plastic (Outside the pen)
- (12) Black plastic (White/red pen interior)
- (13) Light gray plastic (black pen interior)
- (14) White plastic with yellow dots (Corrugated shell)
- (15) Red plastic (Corrugated shell)
- (16) Blue plastic (Corrugated shell)
- (17) Gray plastic with yellow dots (Corrugated shell)

## TEST RESULTS

### 1) 2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP) - Toxic Substances Control Act

With reference to EPA 3550C:2007 & EPA 8270E:2018, Analysis was performed by solvent extraction, followed by Gas Chromatography Mass Spectrometric (GC/MS).

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(1)	(2)	(3)	(4)	(5)		
2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	732-26-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	0.3

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(6)	(7)	(8)	(9)	(10)		
2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	732-26-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	0.3

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(11)	(12)	(13)	(14)	(15)		
2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	732-26-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	0.3

Test Item	CAS No	Result (%)		MDL (%)	Limit (%)
		(16)	(17)		
2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	732-26-3	N.D.	N.D.	0.005	0.3

Remark:

1. N.D. = Not Detected (below MDL)
2. MDL = Method Detection Limit
3. % = Percentage

### 2) Pentachlorothiophenol (PCTP) - Toxic Substances Control Act

With reference to EPA 3550C:2007 & EPA 8270E:2018, Analysis was performed by solvent extraction, followed by Gas Chromatography Mass Spectrometric (GC/MS).

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(1)	(2)	(3)	(4)	(5)		
Pentachlorothiophenol (PCTP)	133-49-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	1

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(6)	(7)	(8)	(9)	(10)		
Pentachlorothiophenol (PCTP)	133-49-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	1

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(11)	(12)	(13)	(14)	(15)		
Pentachlorothiophenol (PCTP)	133-49-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	1

Test Item	CAS No	Result (%)		MDL (%)	Limit (%)
		(16)	(17)		
Pentachlorothiophenol (PCTP)	133-49-3	N.D.	N.D.	0.005	1

## Remark:

1. N.D. = Not Detected (below MDL)
2. MDL = Method Detection Limit
3. % = Percentage

### 3) Toxic Substances Control Act-Hexachlorobutadiene (HCBD)

With reference to EPA 3550C:2007 & EPA 8270E:2018, Analysis was performed by solvent extraction, followed by Gas Chromatography Mass Spectrometric (GC/MS).

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(1)	(2)	(3)	(4)	(5)		
Hexachlorobutadiene (HCBD)	87-68-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(6)	(7)	(8)	(9)	(10)		
Hexachlorobutadiene (HCBD)	87-68-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(11)	(12)	(13)	(14)	(15)		
Hexachlorobutadiene (HCBD)	87-68-3	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)		MDL (%)	Limit (%)
		(16)	(17)		
Hexachlorobutadiene (HCBD)	87-68-3	N.D.	N.D.	0.005	Not Detected

## Remark:

1. N.D. = Not Detected (below MDL)
2. MDL = Method Detection Limit
3. % = Percentage

#### 4) Toxic Substances Control Act-Decabromobiphenylether (decaBDE)

With reference to EPA 3550C:2007 & EPA 8270E:2018, Analysis was performed by solvent extraction, followed by Gas Chromatography Mass Spectrometric (GC/MS).

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(1)	(2)	(3)	(4)	(5)		
Decabromodiphenyl ether (DecaBDE)	1163-19-5	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(6)	(7)	(8)	(9)	(10)		
Decabromodiphenyl ether (DecaBDE)	1163-19-5	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(11)	(12)	(13)	(14)	(15)		
Decabromodiphenyl ether (DecaBDE)	1163-19-5	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)		MDL (%)	Limit (%)
		(16)	(17)		
Decabromodiphenyl ether (DecaBDE)	1163-19-5	N.D.	N.D.	0.005	Not Detected

## Remark:

1. N.D. = Not Detected (below MDL)
2. MDL = Method Detection Limit
3. % = Percentage

#### 5) Toxic Substances Control Act-Phenol, isopropylated phosphate (PIP(3:1))

With reference to EPA 3550C:2007 & EPA 8270E:2018, Analysis was performed by solvent extraction, followed by Gas Chromatography Mass Spectrometric (GC/MS).

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(1)	(2)	(3)	(4)	(5)		
Phenol, isopropylated	68937-41-7	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(1)	(2)	(3)	(4)	(5)		
phosphate (3:1) [PIP (3:1)]								Detected

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(6)	(7)	(8)	(9)	(10)		
Phenol, isopropylated phosphate (3:1) [PIP (3:1)]	68937-41-7	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)					MDL (%)	Limit (%)
		(11)	(12)	(13)	(14)	(15)		
Phenol, isopropylated phosphate (3:1) [PIP (3:1)]	68937-41-7	N.D.	N.D.	N.D.	N.D.	N.D.	0.005	Not Detected

Test Item	CAS No	Result (%)		MDL (%)	Limit (%)
		(16)	(17)		
Phenol, isopropylated phosphate (3:1) [PIP (3:1)]	68937-41-7	N.D.	N.D.	0.005	Not Detected

## Remark:

1. N.D. = Not Detected (below MDL)
2. MDL = Method Detection Limit
3. % = Percentage

---End of Report---