

Test Report No. SHAEC2114751909 Date: 19 Jul 2021 Page 1 of 9

ZHEJIANG NANHUA BIOLOGICAL TECHNOLOGY CO.,LTD.

BUILDING2, NO.129, YUNXING ROAD, XIEQIAO TOWN, HAINING CITY, ZHEJIANG PROVINCE, CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as: Magnesium chloride

desiccant

SGS Job No.: SP21-021952 - SH

Date of Sample Received: 14 Jul 2021

Testing Period: 14 Jul 2021 - 19 Jul 2021

Test Requested: Selected test(s) as requested by client.

Test Method : Please refer to next page(s).

Test Results: Please refer to next page(s).

Conclusion: Based on the performed tests on submitted sample(s), the results of Cadmium,

Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBBs),

Polybrominated diphenyl ethers (PBDEs) and Phthalates such as

Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU. When tested as specified, Dimethyl fumarate(DMF) content of the submitted sample comply with Commission Regulation (EU) No 412/2012 and Entry 61 of

Annex XVII of REACH Regulation (EC) No 1907/2006

Signed for and on behalf of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Carol Luo

Approved Signatory





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Test Results:

#### Test Part Description:

Specimen No. SGS Sample ID Description SN<sub>1</sub> SHA21-147519.005 White powder

#### Remarks:

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL)
- (4) "-" = Not Regulated

#### RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC62321-5:2013, IEC62321-7-2:2017, IEC 62321-6:2015 and IEC62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND



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<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>	
-	mg/kg	5	ND	
-	mg/kg	5	ND	
-	mg/kg	5	ND	
-	mg/kg	5	ND	
-	mg/kg	5	ND	
-	mg/kg	5	ND	
1000	mg/kg	50	ND	
1000	mg/kg	50	ND	
1000	mg/kg	50	ND	
1000	mg/kg	50	ND	
	Limit 1000 1000	- mg/kg 1000 mg/kg 1000 mg/kg 1000 mg/kg	Limit         Unit         MDL           -         mg/kg         5           1000         mg/kg         50           1000         mg/kg         50           1000         mg/kg         50           1000         mg/kg         50	Limit         Unit         MDL         005           -         mg/kg         5         ND           1000         mg/kg         50         ND           1000         mg/kg         50         ND           1000         mg/kg         50         ND           1000         mg/kg         50         ND

#### Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP\_ORG\_ID,FSP\_LANG\_ID: 1258637,25
- (2) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

#### Commission Regulation (EU) No 412/2012 and Entry 61 of Annex XVII of REACH Regulation (EC) No 1907/2006 - Dimethyl fumarate(DMF)

Test Method: Solvent extraction, analysis was performed by GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Dimethyl fumarate(DMF)	0.1	ma/ka	0.1	ND



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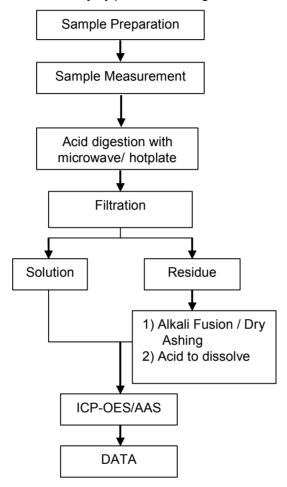
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### **Elements (IEC62321) Testing Flow Chart**

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.





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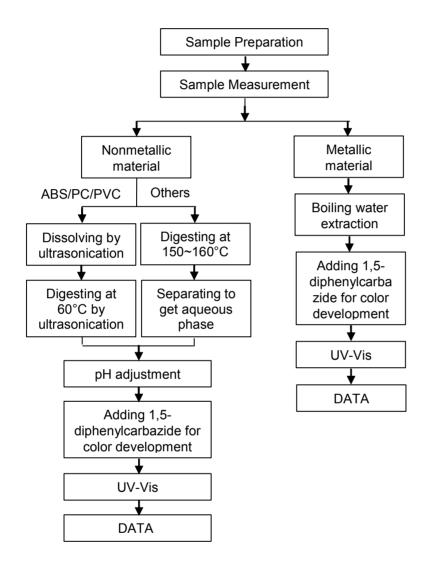
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#### Hexavalent Chromium (Cr(VI)) Testing Flow Chart





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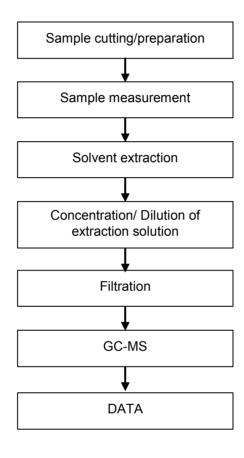
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### PBBs/PBDEs Testing Flow Chart





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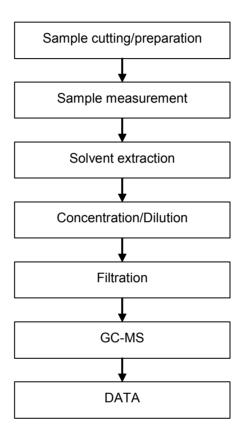
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### **Phthalates Testing Flow Chart**





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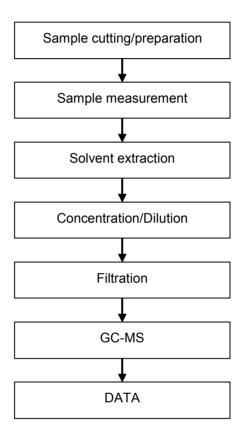
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### **DMF (Dimethyl fumarate) Testing Flow Chart**





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Sample photo:



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