

**Test Report** No. CANEC2201668401 Date: 30 Jan 2022 Page 1 of 9

GAOYI YONGCHANG ZINC INDUSTRY CO., LTD SHILIANGZHUANG INDUSTRIAL ZONE, GAOYI COUNTY, SHIJIAZHUANG, HEBEI PROVINCE, CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as: Zinc oxide 99.7%

SGS Job No.: CP22-003539 - GZ

Manufacturer: Shijiazhuang Dingchang Chemical Co., Ltd

Date of Sample Received: 26 Jan 2022

Testing Period: 26 Jan 2022 - 30 Jan 2022

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 Lead,

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

Polybrominated diphenyl ethers (PBDEs) and Phthalates such as

 ${\it Bis} (\hbox{2-ethylhexyl}) \ phthalate \ (\hbox{DEHP}) \ , \ Butyl \ benzyl \ phthalate \ (\hbox{BBP}), \ Dibutyl \ phthalate \ (\hbox{DBP}) \ , \ and \ Diisobutyl \ phthalate \ (\hbox{DIBP}) \ comply \ with \ the \ limits \ as \ set \ by$ 

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

Signed for and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Sasa Zhi

Sasa Zhi Approved Signatory





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#### **Test Report** No. CANEC2201668401 Date: 30 Jan 2022 Page 2 of 9

Test Results:

# **Test Part Description:**

Specimen No. SGS Sample ID Description SN1 CAN22-016684.001 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+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	11
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	8	ND
Sum of PBBs	1,000	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	1,000	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
Pentabromodiphenyl ether	-	mg/kg	5	ND



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Test Report	No. CANEC22016684	01	Date: 3	30 Jan 2022	Page 3 of 9
Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	
Hexabromodiphenyl ether	-	mg/kg	5	ND	
Heptabromodiphenyl ether	-	mg/kg	5	ND	
Octabromodiphenyl ether	-	mg/kg	5	ND	
Nonabromodiphenyl ether	-	mg/kg	5	ND	
Decabromodiphenyl ether	-	mg/kg	5	ND	
Dibutyl phthalate (DBP)	1,000	mg/kg	50	ND	
Butyl benzyl phthalate (BBP)	1,000	mg/kg	50	ND	
Bis (2-ethylhexyl) phthalate (DEHP)	1,000	mg/kg	50	ND	
Diisobutyl Phthalates (DIBP)	1,000	mg/kg	50	ND	

#### Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) 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:12586 37,25
- (3) 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.

### **Halogen**

Test Method: With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Fluorine (F)	mg/kg	50	ND
Chlorine (CI)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
lodine (I)	mg/kg	50	ND

# **Elementary Analysis**

Test Method: SGS In-house method (GZTC CHEM-TOP-004-01, with reference to EPA 3052:1996), analysis was performed by ICP-OES.

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Arsenic (As)	mg/kg	10	ND
Chromium (Cr)	mg/kg	2	ND
Iron (Fe)	mg/kg	10	ND
Boron(B)	ma/ka	50	ND



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No. CANEC2201668401

Date: 30 Jan 2022 Page 4 of 9



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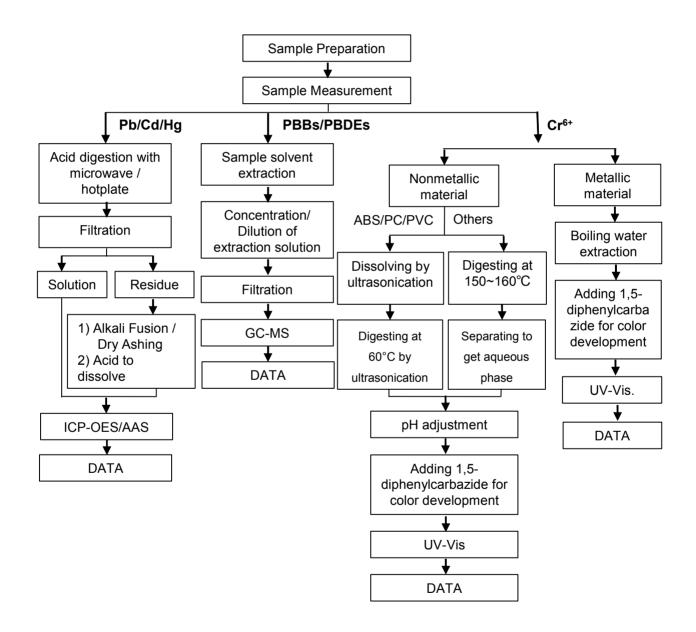


**Test Report** No. CANEC2201668401 Date: 30 Jan 2022 Page 5 of 9

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# Pb/Cd/Hg/Cr6+/PBBs/PBDEs Testing Flow Chart

1) These samples were dissolved totally by pre -conditioning method according to below flow chart. (Cr6+ and PBBs/PBDEs test method excluded).





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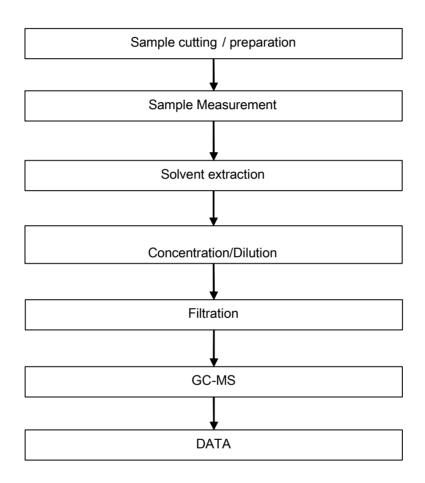
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Page 6 of 9

Date: 30 Jan 2022

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# **Phthalates Testing Flow Chart**





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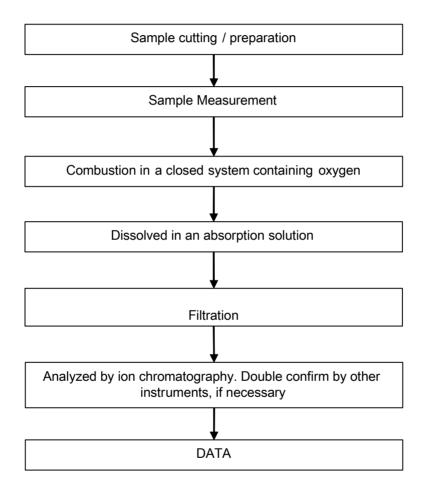
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Page 7 of 9

Date: 30 Jan 2022

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# **Halogen Testing Flow Chart**





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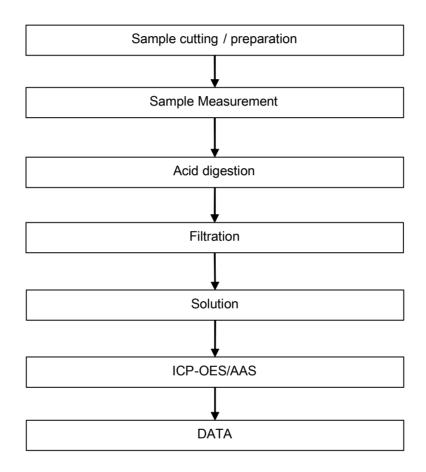
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Page 8 of 9

Date: 30 Jan 2022

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# **Elementary Testing Flow Chart**



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Page 9 of 9

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