



**Test Report**

No.T52310250608TC

Date: MAR 01, 2023

Page 1 of 6

DONGGUAN JIAN PLASTIC & METAL PRODUCTS LTD.  
NO. 6, GAOBU BLVD,GAOBU TOWN, DONGGUAN CITY, GUANGDONG PROVINCE, CHINA 523278

The following samples were submitted and identified by/on behalf of the client as:

SPIN CAST ZINC ALLOY

Buyer : WORLD WIDE  
 Manufacturer : CHINA  
 Country of Origin : CHINA  
 Country of Destination : WORLD WIDE  
 Requested Age Grading : 3+

\*\*\*\*\*

Sample Receiving Date : FEB 15, 2023  
 Further Information Date : MAR 01, 2023  
 Testing Period : FEB 15, 2023 TO MAR 01, 2023



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.  
 Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone:(86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.  
 Shenzhen Branch Testing Center Hardlines

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No.430, Jilua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn  
 中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江灏(坂田)工业厂区厂房4号 101-901、2号101、3号301-501 邮编: 518129 t:(86-755) 25328888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



Test Report

No. T52310250608TC

Date: MAR 01, 2023

Page 2 of 6

Selected test(s) as requested by the client, please refer to test result page(s) for details:

Test Requested		Conclusion
1.	Directive 2009/48/EC and its amendment Council Directive (EU) 2017/738, Commission Directive (EU) 2018/725, Commission Directive (EU) 2019/1922 – EN 71-3:2019 + A1:2021 – Migration of certain elements	PASS
2.	ASTM F963-17 - Standard Consumer Safety Specification on Toy Safety – Heavy Elements content	--
	Heavy Elements content in paint or similar surface coating materials in submitted sample in accordance with ASTM F963-17 - Standard Consumer Safety Specification on Toy Safety, Clause 4.3.5.1	NOT APPLICABLE (SEE REMARK)
	Heavy Elements content in substrate materials in submitted sample in accordance with ASTM F963-17 - Standard Consumer Safety Specification on Toy Safety, Clause 4.3.5.2	PASS

Remark: There were no surface coating found in the said submitted sample.

\*\*\*\*\* FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) \*\*\*\*\*

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



Qu Ping, Kiky  
Dept. Manager



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.  
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone:(86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Testing Center Hardlines

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No.430, Jilua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn  
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江灏(坂田)工业厂区厂房4号 101-901、2号101、3号301-501 邮编: 518129 t:(86-755) 25328888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Results:

**Directive 2009/48/EC and its amendment Council Directive (EU) 2017/738, Commission Directive (EU) 2018/725, Commission Directive (EU) 2019/1922 – EN 71-3:2019+A1:2021 – Migration of certain elements**

Category III: Scraped-off toy material

Method: With reference to EN 71-3:2019+A1:2021. Analysis of general elements was performed by ICP-OES / Chromium (III) was obtained by calculation, chromium (VI) was analyzed by IC-UV-Vis or LC-ICP-MS / organic tin was analyzed by GC-MS.

Test Item(s)	Result(s)	MDL	Permissible Limit
Specimen No.	1	--	--
Mass of trace amount (mg)	/	--	--
Soluble Aluminium (Al) (mg/kg)	86	50	28130
Soluble Antimony (Sb) (mg/kg)	ND	10	560
Soluble Arsenic (As) (mg/kg)	ND	10	47
Soluble Barium (Ba) (mg/kg)	ND	50	18750
Soluble Boron (B) (mg/kg)	ND	50	15000
Soluble Cadmium (Cd) (mg/kg)	ND	5	17
Soluble Chromium+ (Cr) (mg/kg)	ND	1	--
Soluble Chromium (III) (Cr (III)) (mg/kg)	ND	1	460
Soluble Chromium (VI) (Cr (VI)) (mg/kg)	ND	0.010	0.053
Soluble Cobalt (Co) (mg/kg)	ND	10	130
Soluble Copper (Cu) (mg/kg)	ND	50	7700
Soluble Lead (Pb) (mg/kg)	ND	2.3	23
Soluble Manganese (Mn) (mg/kg)	ND	50	15000
Soluble Mercury (Hg) (mg/kg)	ND	10	94
Soluble Nickel (Ni) (mg/kg)	ND	10	930
Soluble Selenium (Se) (mg/kg)	ND	10	460
Soluble Strontium (Sr) (mg/kg)	ND	50	56000
Soluble Tin (Sn) (mg/kg)	ND	3.0	180000
Soluble Organic Tin -- (mg/kg)	ND	--	12
Soluble Zinc (Zn) (mg/kg)	2548	50	46000

Specimen Description:

1. Silvery metal part



SGS-CSTC (Shenzhen) Technical Services Co., Ltd.  
Shenzhen Branch Testing Center Hardlines

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone:(86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Room 101-501, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Banian) Industrial Plant Area, No.430, Jihua Road, Banian Community, Banian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn  
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江灏(坂田)工业厂区厂房4号 101-501、2号101、3号101、3号301-501 邮编: 518129 t:(86-755) 25328888 sgs.china@sgs.com



# Test Report

No. T52310250608TC

Date: MAR 01, 2023

Page 4 of 6

- Note:
- mg/kg = milligram per kilogram
  - mg = milligram
  - ND = Not Detected (lower than MDL)
  - MDL = Method Detection Limit
  - 1% = 10000 mg/kg = 10000 ppm
  - + Soluble Chromium is not restricted by EN 71-3:2019+A1:2021, results shown only for reference

The below note(s) is(are) applicable in case the relevant superscript(s) and symbol(s) was(were) shown in the result table:

- \* = Exceeds Permissible Limit

### ASTM F963-17, Clause 4.3.5.2 – Heavy Elements in Substrate Materials

Method: With reference to CPSC-CH-E1002-08.3 / CPSC-CH-E1001-08.3 / ASTM F963-17 Clause 8.3 / CPSC-CH-E1004-11

Analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)/ Inductively Coupled Plasma Mass Spectrometer (ICP-MS)

### Soluble Heavy Metal Content

Test Item(s)				Pb	Sb	As	Ba	Cd	Cr	Hg	Se
MDL (ppm)				5	5	2.5	10	5	5	5	10
Migration Limit (ppm) -- Other Than Modeling Clays				90	60	25	1000	75	60	60	500
Migration Limit (ppm) -- Modeling Clays				90	60	25	250	50	25	25	500
Specimen No.	Alias No.	Tracing No.	Mass of trace amount (mg)	Adjusted Migration Result(s) (ppm)							
1	3	1	/	ND	ND	ND	ND	ND	ND	ND	ND

### Specimen Description:

1. Silvery metal part



SGS-CSTC (Shenzhen) Technical Services Co., Ltd.  
Shenzhen Branch Testing Center Hardlines

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone:(86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Room 101-501, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No.430, Jilua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 [www.sgs.com](http://www.sgs.com)  
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江灏(坂田)工业厂区厂房4号 101-901、2号101、3号301-501 邮编: 518129 t:(86-755) 25328888 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Member of the SGS Group (SGS SA)

- Note:
- ppm = parts per million
  - µg/component = microgramme per component
  - ND = Not Detected (lower than MDL)
  - MDL = Method Detection Limit = 10 ppm
  - 1% = 10000 mg/kg = 10000 ppm

The below note(s) is(are) applicable in case the relevant superscript(s) and symbol(s) was(were) shown in the result table:

- <sup>Δ</sup> Test result is over recommended action limit (80% of the regulatory limit). As the result is based on composite test and falls into an uncertain range, where “Pass” or “Fail” cannot be truly defined, “Interim-Fail” is given since the specimen may possibility fail according to the regulatory limit. Individual test is highly recommended to determine the exact Lead content in each component. The decision rule has prescribed in the regulation or standard, conformity reporting will base on the standard.
- + Composite test has been performed as per client’s request and the results are calculated using the minimum specimen weight
- \* Exceeds Permissible Limit

Remark 1: Since the data and / or information above division line of front page is provided by the applicant, the relevant results or conclusions of this report are only made for these data and / or information, SGS shall not be responsible for the authenticity and integrity of such data and information and the validity of the results and / or conclusions arising therefrom. Testing results only apply to the sample as received.

Remark 2: The statement of conformity has considered the decision rule based on the Guarded acceptance (8.3.2 of ISO/IEC GUIDE 98-4:2012)- When the measured value falls within the guard band, only the test data and measurement uncertainty will be reported. The guard band is equal to the expanded measurement uncertainty with a 95% coverage probability( $k=2$ ),  $w = U_{95}$ . The Probability of False Accept and the Probability of False Reject of the decision rule are 2.5%.

For Upper Tolerance Limit ( $T_U$ ):

Pass - when the measurement result is below  $T_U - U_{95}$

Fail - when the measurement result is above  $T_U + U_{95}$

Inconclusive - when the measurement result is falling in guard band  $[T_U - U_{95}, T_U + U_{95}]$

For Lower Tolerance Limit ( $T_L$ ):

Pass - when the measurement result is above  $T_L + U_{95}$

Fail - when the measurement result is below  $T_L - U_{95}$

Inconclusive - when the measurement result is falling in guard band  $[T_L - U_{95}, T_L + U_{95}]$



### Sample Picture (As received)

Pic.1



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*

