

Test Report	No.: SHAMIN23009320501 Date: Jul 12, 20	23 Page 1 of 10		
Client Name: MIMAK	ENGINEERING CO., LTD			
Client Address: 2182-3	Shigeno-Otsu, Tomi-city, Nagano, Japan			
Sample Name:	LH-100-C			
Client Ref. Information:	SPC-0597C / SPC-0659C / LH100-C			
The above sample(s) ar	d information were provided by the client.			
SGS Job No.:	MCHCZ2301515-01A			
Sample Receiving Date:	Jun 30, 2023			
Testing Period:	Jun 30, 2023 ~ Jul 12, 2023			
Test Requested:	Select test(s) as requested by the client.			
Test Method(s):	Please refer to next page(s).			
Test Result(s):	Please refer to next page(s).			
Test Requirement		Conclusion		
2011/65/EU- Lead, Me biphenyls (PBBs), Poly phthalate (DEHP), But	EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)			

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

Sue Shorg

Element(s)

Halogen

Sue Sheng Approved Signatory



See Results

See Results



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 <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Co eport & certificate, please contact us at telephone: (86-755) 8307 1443,

3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 中国・上海・徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899

t E&E (86-21) 61402553 f E&E (86-21)64953679 www.sgsgroup.com.cn e sgs.china@sgs.com



Test Report

No.: SHAMIN23009320501

Date: Jul 12, 2023

Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SHA23-0093205-0001.C001	Blue liquid

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected (< MDL)

(4) "-" = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

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

Test Item(s)	Limit	Unit(s)	MDL	A1
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
Polybromobiphenyl (PBBs)	1000	mg/kg	-	ND
Monobromobiphenyl (MonoBB)	-	mg/kg	5	ND
Dibromobiphenyl (DiBB)	-	mg/kg	5	ND
Tribromobiphenyl (TriBB)	-	mg/kg	5	ND
Tetrabromobiphenyl (TetraBB)	-	mg/kg	5	ND
Pentabromobiphenyl (PentaBB)	-	mg/kg	5	ND
Hexabromobiphenyl (HexaBB)	-	mg/kg	5	ND
Heptabromobiphenyl (HeptaBB)	-	mg/kg	5	ND
Octabromobiphenyl (OctaBB)	-	mg/kg	5	ND
Nonabromobiphenyl (NonaBB)	-	mg/kg	5	ND
Decabromobiphenyl (DecaBB)	-	mg/kg	5	ND
Polybromodiphenyl ether(PBDEs)	1000	mg/kg	-	ND
Monobromodiphenylether (MonoBDE)	-	mg/kg	5	ND
Dibromodiphenylether (DiBDE)	-	mg/kg	5	ND
Tribromodiphenylether (TriBDE)	-	mg/kg	5	ND
Tetrabromodiphenylether (TetraBDE)	-	mg/kg	5	ND
Pentabromodiphenylether (PentaBDE)	-	mg/kg	5	ND
Hexabromodiphenylether (HexaBDE)	-	mg/kg	5	ND
Heptabromodiphenylether (HeptaBDE)	-	mg/kg	5	ND
Octabromodiphenylether (OctaBDE)	-	mg/kg	5	ND
Nonabromodiphenylether (NonaBDE)	-	mg/kg	5	ND
Decabromodiphenylether (DecaBDE)	-	mg/kg	5	ND
Dibutyl Phthalate(DBP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate(BBP)	1000	mg/kg	50	ND



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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent 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. Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755)8307 1443,

3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t E&E (86–21) 61402553 f E&E (86–21)64953679 www.sgsgroup.com.cn t HL (86–21) 61402594 f HL (86–21)61156899 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)



les	St Report No.:	SHAMIN23	009320501	Date: Ju	l 12, 2023	Page 3 of	10
	Test Item(s)		Limit	Unit(s)	MDL	A1	
	Bis-(2-ethylhexyl) Phthalate(I	DEHP)	1000	mg/kg	50	ND	
	Diisobutyl Phthalate(DIBP)		1000	mg/kg	50	ND	

Notes:

т

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.

(2) IEC 62321 series is equivalent to EN 62321 series.

(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.

Element(s)

Test Method: With reference to US EPA 3052:1996, analysis was performed by ICP-OES/AAS.

Test Item(s)	Unit(s)	MDL	A1
Antimony(Sb)	mg/kg	10	ND

<u>Halogen</u>

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

Test Item(s)	Unit(s)	MDL	A1
Fluorine(F)	mg/kg	20	ND
Chlorine(Cl)	mg/kg	50	ND
Bromine(Br)	mg/kg	50	ND
lodine(I)	mg/kg	50	ND

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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.aspx and, for electronic format documents, 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 and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and 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 unavulual 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. Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443,

3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 t t E&E 中国・上海・徐江区宜山路889号3号楼 邮编: 200233 t t HL (8

t E&E (86-21) 61402553 f E&E (86-21)64953679 www.sgsgroup.com.cn t HL (86-21) 61402594 f HL (86-21)61156899 e sgs.china@sgs.com

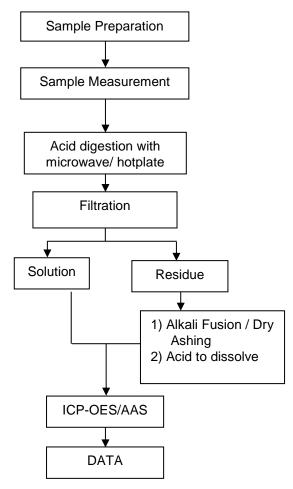


No.: SHAMIN23009320501

Date: Jul 12, 2023

Elements Testing Flow Chart

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





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/T ort & certificate, please contact us at telephone: (86-755) 8307 1443,

3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 中国・上海・徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899

www.sgsgroup.com.cn t E&E (86-21) 61402553 f E&E (86-21)64953679 e sgs.china@sgs.com

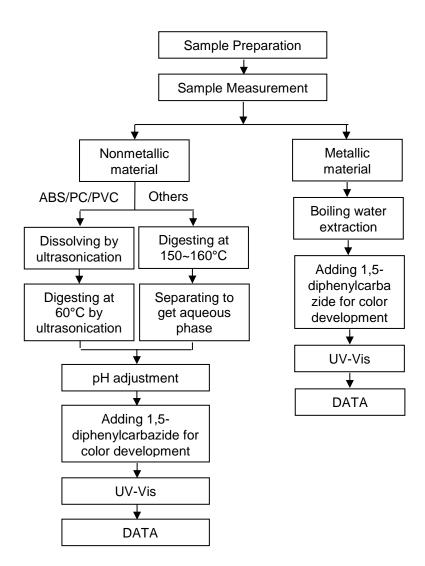


No.: SHAMIN23009320501

ATTACHMENTS

Test Report

Hexavalent Chromium (Cr(VI)) Testing Flow Chart





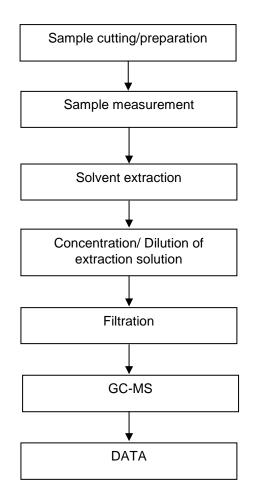
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-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 cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or reguest ated the results shown in this test report refer only to the sample(s) tested.

3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 中国 · 上海 · 徐汇区宜山路889号3号楼 邮编: 200233 t E&E (86-21) 61402553 f E&E (86-21)64953679 www.sgsgroup.com.cn t HL (86-21) 61402594 f HL (86-21)61156899 e sgs.china@sgs.com



No.: SHAMIN23009320501

PBBs/PBDEs Testing Flow Chart





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-en-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 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 unaverued to the sample(s) tested. Attention: To check the authenticity of testing (Inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, report & certificate, please contact us at telephone: (86-755) 8307 1443,

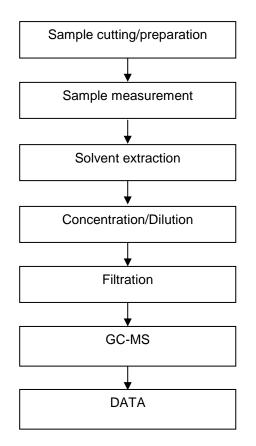
3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 t E&E (86-21) 61402553 f E&E (86-21)64953679 www.sgsgroup.com.cn 中国・上海・徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899

e sgs.china@sgs.com



No.: SHAMIN23009320501

Phthalates Testing Flow Chart





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.aspx and, for electronic format documents, 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 and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and 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 unavulual 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. Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, eport & certificate, please contact us at telephone: (86-755) 8307 1443,

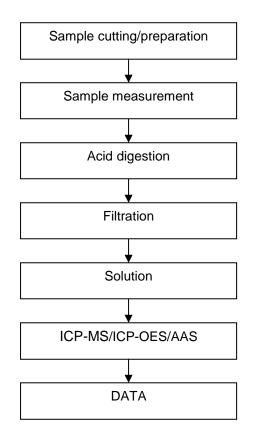
3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 中国・上海・徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899

t E&E (86-21) 61402553 f E&E (86-21)64953679 www.sgsgroup.com.cn e sgs.china@sgs.com



No.: SHAMIN23009320501

Elements Testing Flow Chart





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.aspx and, for electronic format documents, Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this 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. 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 resputs shown in this test report refer only to the sample(s) tested. Attention: <u>To check the authenticity of testing of Inspection report & certificate, please contact us at telephone: (86-755)8307 1443, Attention: <u>To check the authenticity of testing (Inspection report & certificate, please contact us at telephone: (86-755)8307 1443, Attention: <u>To check the authenticity of testing (Inspection report & certificate, please contact us at telephone: (86-755)8307 1443, Attention: <u>To check the authenticity of testing (Inspection report & certificate, please contact us at telephone: (86-755)8307 1443, Attention: <u>To check the authenticity of testing (Inspection report & certificate, please contact us at telephone: (86-755)8307 1443, Attention: <u>To check the authenticity of testing</u> (Inspection report & certificate, please contact us at telephone: (86-755)8307 1443, Attention: <u>To check the authenticity of testing</u> (Inspection ter port & </u></u></u></u></u>

3⁴⁸Building,No.889 Yishan Road Xuhui District,Shanghai China 200233 t t E&E (86-21) 61402553 中国・上海・徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594

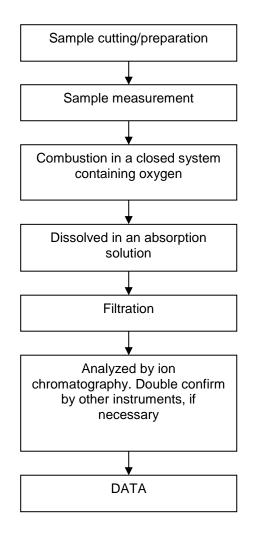
t E&E (86–21) 61402553 f E&E (86–21)64953679 www.sgsgroup.com.cn t HL (86–21) 61402594 f HL (86–21)61156899 e sgs.china@sgs.com



No.: SHAMIN23009320501

Test Report ATTACHMENTS

Halogen Testing Flow Chart





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-en-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 cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or reguest ated the results shown in this test report refer only to the sample(s) tested. report & certificate, please contact us at telephone: (86-755) 8307 1443,

3rdBuilding,No.889 Yishan Road Xuhui District,Shanghai China 200233 中国・上海・徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21) 61156899

t E&E (86-21) 61402553 f E&E (86-21)64953679 www.sgsgroup.com.cn e sgs.china@sgs.com





SGS authenticate the photo on original report only *** End of Report ***



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-en-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 cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or reguest ated the results shown in this test report refer only to the sample(s) tested.

3^{rf}Building,No.889 Yishan Road Xuhui District,Shanghai China 200233 t E 中国・上海・徐汇区宜山路889号3号楼 邮编: 200233 t H

t E&E (86-21) 61402553 f E&E (86-21)64953679 www.sgsgroup.com.cn t HL (86-21) 61402594 f HL (86-21)61156899 e sgs.china@sgs.com