



TCR Engineering Services Pvt. Ltd. VKB House, EL-182 MIDC-TTC Electronic Zone, Mahape Navi Mumbai - 400 710, India T: +91-9022137295 | W: www.tcreng.com

## **TEST REPORT**

ULR - TC690520000011177F

Page 1 of 1

T.C. No.

BZ9767

Date: 27-08-2020

Issued To.

M/s FLU-CON COMPONENETS PVT. LTD.

A/112, MIDC Phase-1, Road No.5 & 7, Dombivali(E), Dist. Thane,

Maharashtra-421 203

Party Ref.

: FC/QAQC/OG/LAB/20-21/012

**Condition of Sample** 

Plastic Sample

Ref. Date

13-08-2020

**Nature of Sample** 

Nylon Molded Hexagonal Spacer. Batch No: 1921505490

Specification

Sample Received on **Date of Completion** 

18-08-2020

Sample Drawn By

Party

27-08-2020

**Enclosure** 

NIL

Test

**ROHS** 

Sample Id

Hexagonal SpacerM3 - 8 A/F FCM3HMF-10

## I. Chemical Testing

### 1. Hazardous and Restricted Chemicals

**ROHS TEST** 

Test Method: IEC 62321-3-1 2013

Equipment: PORTABLE XRF SPECTROMETER Make: Thermo Niton Model: XL2-800 Sr. No.: 91602

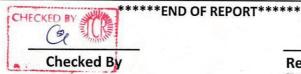
TCR ENGINEERING SERVICES PVT LTD. Mahape, Navi Mumbai **Test Location** TO SCREEN FOR R.O.H.S. DIRECTIVE 2011/65/EU REQUIREMENTS (Amended Annexure II-Directive EU **Test Purpose** 2015/863 of 31st Mar 2015)

Screening limits in mg/kg for regulated elements in various matrices						
Requirement	Hg	Br	Pb	Cr	Cd	
Polymer Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(300-3δ)<x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<></td></x<(1300+3>	P≤(300-3δ) <x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<>	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<>	P≤(70-3δ)<(130+3 δ) ≥F	
Metallic Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td></td><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<(1300+3>		P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<>	P≤(70-3δ)<(130+3 δ) ≥F	
Electronics	P≤(500-3δ) <x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(250-3δ)<x< td=""><td>P≤(500-3δ)<x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<></td></x<(1500+3></td></x<></td></x<(1500+3>	P≤(250-3δ) <x< td=""><td>P≤(500-3δ)<x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<></td></x<(1500+3></td></x<>	P≤(500-3δ) <x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<></td></x<(1500+3>	P≤(500-3δ) <x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<>	LOD< X <(250+3 δ) ≥F	

Sr.No	Name of the Analyte	Result	Test Method	Limits as per RoHS Directive	Conclusion
1	Cadmium(Cd) in Mg/Kg(PPM)	Not Detected	IEC 62321-3-1 2013-	100 Max	Below Limit(P)
2	Lead(Pb) in Mg/Kg(PPM)	Not Detected	IEC 62321-3-1 2013-	1000 Max.	Below Limit(P)
3	Mercury(Hg) in Mg/Kg(PPM)	Not Detected	IEC 62321-3-1 2013-	1000 Max.	Below Limit(P)
4	Chromium(Cr) in Mg/Kg(PPM)	Not Detected	IEC 62321-3-1 2013-	1000 Max.	Below Limit(P)

Remark: The above sample meets the specified requirements of ROHS directive 2011/65/EU & its subsequent amendments directives (Amended Annexure II-Directive EU 2015/863 of 31st Mar 2015) with respect to elements analysed.

Srs/-



Reviewed & Authorised By

GANESH SONAWANE

TCR Engineering Services, India: Redefining On-Time Quality since 1973

A NABL/ISO/IEC 17025:2017 and BIS accredited Material Testing, Metallurgical Evalution, Corrosion Testing, NDT/Inspection, Civil Audit, Engineering Consulting & Research Laboratory.

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2. This Test Report cannot be re-produced either in part or in full without the explicit written approval of TCR.

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# **TEST REPORT**

ULR - TC690520000011178F

Page 1 of 1

T.C. No.

BZ9768

Date: 27-08-2020

Issued To.

M/s FLU-CON COMPONENETS PVT. LTD.

A/112,MIDC Phase-1, Road No.5 & 7, Dombivali(E), DIst.Thane,

Maharashtra-421 203

Party Ref.

FC/QAQC/OG/LAB/20-21/012

Condition of Sample : Plastic Sample

Ref. Date

13-08-2020

Nylon Molded Hexagonal Spacer. Batch No: 1921505490

**Nature of Sample Specification** 

Sample Received on

18-08-2020

Sample Drawn By

Party

**Date of Completion** 

27-08-2020

**Enclosure** 

NIL

Test

**ROHS** 

Sample Id

Hexagonal Spacer M3 - 8 A/F FCM3HFF-15

### I. Chemical Testing

### 1. Hazardous and Restricted Chemicals

#### **ROHS TEST**

Equipment: PORTABLE XRF SPECTROMETER Make: Thermo Niton Model: XL2-800 Sr. No.: 91602

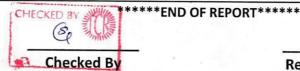
Test Location	:	TCR ENGINEERING SERVICES PVT LTD. Mahape, Navi Mumbai
Test Purpose	:	TO SCREEN FOR R.O.H.S. DIRECTIVE 2011/65/EU REQUIREMENTS (Amended Annexure II-Directive EU 2015/863 of 31st Mar 2015)

Screening limits in m	ng/kg for regulated elements	in various matric	ces		
Requirement	Hg	Br	Рb	Cr	Cd
Polymer Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(300-3δ)<x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<></td></x<(1300+3>	P≤(300-3δ) <x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<>	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<>	P≤(70-3δ)<(130+3 δ) ≥F
Metallic Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td></td><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<(1300+3>		P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<>	P≤(70-3δ)<(130+3 δ) ≥F
Electronics	P≤(500-3δ) <x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(250-3δ)<x< td=""><td>P≤(500-3δ)<x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<></td></x<(1500+3></td></x<></td></x<(1500+3>	P≤(250-3δ) <x< td=""><td>P≤(500-3δ)<x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<></td></x<(1500+3></td></x<>	P≤(500-3δ) <x<(1500+3 td="" δ)="" ≥f<=""><td>P≤(500-3δ)<x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<></td></x<(1500+3>	P≤(500-3δ) <x< td=""><td>LOD&lt; X &lt;(250+3 δ) ≥F</td></x<>	LOD< X <(250+3 δ) ≥F

Sr.No	Name of the Analyte	Result	Test Method	Limits as per RoHS Directive	Conclusion
1	Cadmium(Cd) in Mg/Kg(PPM)	Not Detected	IEC 62321-7-1 2015	100 Max	Below Limit(P)
2	Lead(Pb) in Mg/Kg(PPM)	Not Detected	IEC 62321-7-1 2015	1000 Max.	Below Limit(P)
3	Mercury(Hg) in Mg/Kg(PPM)	Not Detected	IEC 62321-7-1 2015	1000 Max.	Below Limit(P)
4	Chromium(Cr) in Mg/Kg(PPM)	Not Detected	IEC 62321-7-1 2015	1000 Max.	Below Limit(P)

Remark: The above sample meets the specified requirements of ROHS directive 2011/65/EU & its subsequent amendments directives (Amended Annexure II-Directive EU 2015/863 of 31st Mar 2015) with respect to elements analysed.

Srs/-



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# **TEST REPORT**

ULR - TC690520000011179F

Page 1 of 1

T.C. No.

: BZ9769

Date: 27-08-2020

Issued To.

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A/112, MIDC Phase-1, Road No.5 & 7, Dombivali(E), Dist. Thane,

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Party Ref.

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Condition of Sample : Plastic Sample

Ref. Date

13-08-2020

**Nature of Sample** 

Nylon Molded Hexagonal Spacer. Batch No: 1921505490

Sample Received on

18-08-2020

Sample Drawn By

Specification

**Date of Completion** 

27-08-2020

Party

**Enclosure** 

Test

**ROHS** 

NIL

Sample Id

Hexagonal Spacer M5 - 12 A/F FCM5HMF-020

# I. Chemical Testing

## 1. Hazardous and Restricted Chemicals

#### **ROHS TEST**

Equipment: PORTABLE XRF SPECTROMETER Make: Thermo Niton Model: XL2-800 Sr. No.: 91602

Test Location	:	TCR ENGINEERING SERVICES PVT LTD. Mahape, Navi Mumbai
Test Purpose	:	TO SCREEN FOR R.O.H.S. DIRECTIVE 2011/65/EU REQUIREMENTS (Amended Annexure II-Directive EU 2015/863 of 31st Mar 2015)

Requirement	Hg	Br	Pb	Cr	Cd
Polymer Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(300-3δ)<x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<></td></x<(1300+3>	P≤(300-3δ) <x< td=""><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<>	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<>	P≤(70-3δ)<(130+3 δ) ≥F
Metallic Materials	P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td></td><td>P≤(700-3δ)<x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3></td></x<(1300+3>		P≤(700-3δ) <x<(1300+3 td="" δ)="" ≥f<=""><td>P≤(700-3δ)<x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<></td></x<(1300+3>	P≤(700-3δ) <x< td=""><td>P≤(70-3δ)&lt;(130+3 δ) ≥F</td></x<>	P≤(70-3δ)<(130+3 δ) ≥F
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Sr.No	Name of the Analyte	Result	Test Method	Limits as per RoHS Directive	Conclusion
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2	Lead(Pb) in Mg/Kg(PPM)	Not Detected	IEC 62321-3-1 2013	1000 Max.	Below Limit(P)
3	Mercury(Hg) in Mg/Kg(PPM)	Not Detected	IEC 62321-3-1 2013	1000 Max.	Below Limit(P)
4	Hexavalent Chromium [Cr(VI)] in Mg/Kg(PPM)			1000 Max.	

Remark: The above sample meets the specified requirements of ROHS directive 2011/65/EU & its subsequent amendments directives (Amended Annexure II-Directive EU 2015/863 of 31st Mar 2015) with respect to elements analysed.

Srs/-



\*\*\*\*\*END OF REPORT\*\*\*\*\*

Reviewed & Authorised By GANESH SONAWANE

(QAM)

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