

TEST REPORT

ROGERS CORPORATION

245 WOODSTOCK ROAD, WOODSTOCK, CT. 06281, USA

REPORT NO.KE/2019/11316

DATE: 2019/01/17

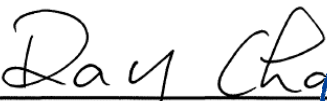
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THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED AND IDENTIFIED BY/ON BEHALF OF THE CLIENT AS :

SAMPLE DESCRIPTION : FAL.
COLOR : CLEAR.
MATERIAL COMPOSITION : POLYESTER FILM WITH ADHESIVE.
COUNTRY OF ORIGIN : USA.
COUNTRY OF DESTINATION : USA.
PO : 1700010269.
SAMPLE RECEIVED : 2019/01/11.
TESTING PERIOD : 2019/01/11 TO 2019/01/17.
SAMPLE SUBMITTED BY : ROGERS CORPORATION.

TEST REQUESTED : (1)AS SPECIFIED BY CLIENT, WITH REFERENCE TO RoHS 2011/65/EU ANNEX II AND AMENDING DIRECTIVE (EU) 2015/863 TO DETERMINE CADMIUM, LEAD, MERCURY, CR(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP CONTENTS IN THE SUBMITTED SAMPLE(S).
(2) PLEASE REFER TO NEXT PAGES FOR THE OTHER ITEM(S).

TEST RESULT(S) : PLEASE REFER TO NEXT PAGE(S).


Ray Chang Ph.D. / Manager - Tech
Signed for and on behalf of
SGS Taiwan Limited
Chemical Laboratory-Kaohsiung



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TEST RESULT(S) :

TEST ITEM(S)	UNIT	METHOD	MDL	RESULT
CADMIUM (Cd)	ppm	WITH REFERENCE TO IEC 62321-5:2013 AND PERFORMED BY ICP-OES.	2	n.d.
MERCURY (Hg)	ppm	WITH REFERENCE TO IEC 62321-4:2013 AND PERFORMED BY ICP-OES.	2	n.d.
LEAD (Pb)	ppm	WITH REFERENCE TO IEC 62321-5:2013 AND PERFORMED BY ICP-OES.	2	n.d.
CHROMIUM VI	ppm	WITH REFERENCE TO IEC 62321-7-2:2017 AND PERFORMED BY UV-VIS.	8	n.d.
POLYBROMINATED BIPHENYL	---	---	---	---
MONOBROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
DIBROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
TRIBROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
TETRABROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
PENTABROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
HEXABROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.

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TEST ITEM(S)	UNIT	METHOD	MDL	RESULT
HEPTABROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
OCTABROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
NONABROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
DECABROMOBIPHENYL	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
SUM OF PBBs	ppm	---	---	n.d.
POLYBROMINTED BIPHENYL ETHERS (PBDEs)	---	---	---	---
MONOBROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
DIBROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
TRIBROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
TETRABROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
PENTABROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
HEXABROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
HEPTABROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.

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TEST ITEM(S)	UNIT	METHOD	MDL	RESULT
OCTABROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
NONABROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
DECABROMODIPHENYL ETHER	ppm	WITH REFERENCE TO IEC 62321-6: 2015 AND PERFORMED BY GC/MS.	5	n.d.
SUM OF PBDEs	ppm	---	---	n.d.
PHTHALATES	---	---	---	---
DI-ISOBUTYL PHTHALATE (DIBP) (CAS NO.84-69-5)	ppm	WITH REFERENCE TO IEC 62321-8:2017. ANALYSIS WAS PERFORMED BY GC/MS.	50	n.d.
DIBUTYL PHTHALATE (DBP) (CAS NO.84-74-2)	ppm	WITH REFERENCE TO IEC 62321-8:2017. ANALYSIS WAS PERFORMED BY GC/MS.	50	n.d.
BUTYL BENZYL PHTHALATE (BBP) (CAS NO.85-68-7)	ppm	WITH REFERENCE TO IEC 62321-8:2017. ANALYSIS WAS PERFORMED BY GC/MS.	50	n.d.
BIS(2-ETHYLHEXYL) PHTHALATE (DEHP) (CAS NO.117-81-7)	ppm	WITH REFERENCE TO IEC 62321-8:2017. ANALYSIS WAS PERFORMED BY GC/MS.	50	n.d.
DI ISONONYL PHTHALATE (DINP) (CAS NO.28553-12-0/68515-48-0)	ppm	WITH REFERENCE TO IEC 62321-8:2017. ANALYSIS WAS PERFORMED BY GC/MS.	50	n.d.
DI-ISO-DECYL PHTHALATE (DIDP) (CAS NO.26761-40-0/68515-49-1)	ppm	WITH REFERENCE TO IEC 62321-8:2017. ANALYSIS WAS PERFORMED BY GC/MS.	50	n.d.
DI-N-OCTYL PHTHALATE (DNOP) (CAS NO.117-84-0)	ppm	WITH REFERENCE TO IEC 62321-8:2017. ANALYSIS WAS PERFORMED BY GC/MS.	50	n.d.

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TEST ITEM(S)	UNIT	METHOD	MDL	RESULT
HALOGEN (F, Cl, Br, I) CONTENT	---	---	---	---
HALOGEN-FLUORINE (F) (CAS No.: 14762-94-8)	ppm	WITH REFERENCE TO BS EN 14582:2016. ANALYSIS WAS PERFORMED BY IC.	50	n.d.
HALOGEN-CHLORINE (Cl) (CAS No.: 22537-15-1)	ppm	WITH REFERENCE TO BS EN 14582:2016. ANALYSIS WAS PERFORMED BY IC.	50	n.d.
HALOGEN-BROMINE (Br) (CAS No.: 10097-32.2)	ppm	WITH REFERENCE TO BS EN 14582:2016. ANALYSIS WAS PERFORMED BY IC.	50	n.d.
HALOGEN-IODINE (I) (CAS No.: 14362-44-8)	ppm	WITH REFERENCE TO BS EN 14582:2016. ANALYSIS WAS PERFORMED BY IC.	50	n.d.

NOTE 1 : mg/kg=ppm

NOTE 2 : MDL = METHOD DETECTION LIMIT.

NOTE 3 : n.d. = NOT DETECTED.

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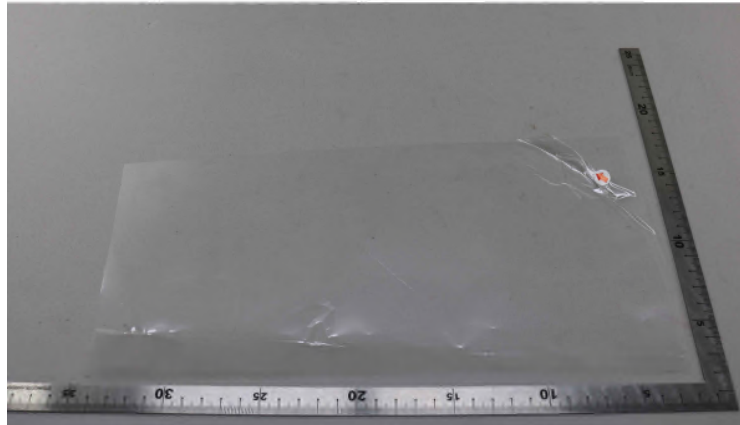
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SAMPLE PHOTO

(The tested sample / part is marked by an arrow if it's shown on the photo.)

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** END OF REPORT **

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