

# TEST REPORT (시 험 성 적 서)

신청기관 (인) :㈜두산전자

APPLICANT : Doosan Corporation Electro-Materials

주소 (한글) :충청북도 증평군 증평읍 두산로 40

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발행면수 (PAGE):1 of 4

발행일자 (DATE): 2020. 11. 03.

시험성적서 번호 (REPORT NO.) :RT20R-S6105-006-K1

시료 명세 :시료에 대한 상세한 정보는 아래와 같음 (SAMPLE DESCRIPTION) (The following submitted sample(s) said to be)

제품명/형식 : DS-7408 (NAME/TYPE OF PRODUCT) (DS-7408)

시료고유번호 : RT20R-S6105-006 (SAMPLE ID NO.) (RT20R-S6105-006)

제품 생산자/공급자 : ㈜두산전자

(MANUFACTURER/VENDOR) (Doosan Corporation Electro-Materials)

시료접수일자 : 2020. 10. 12. (SAMPLE RECEIVED) (Oct. 12, 2020)

시험일자 : 2020. 10. 20. ~ 2020. 11. 03. (TESTING DATE) : (Oct. 20, 2020 ~ Nov. 03, 2020)

시험방법 : 이 시험성적서의 다음 페이지 첨부

(TEST METHOD) (Please see the following page)

시험결과 : 이 시험성적서의 다음 페이지 첨부

(TEST RESULT) (Please see the following page)

비고 (Notes): 1. 이 시험성적서는 제시된 시료 및 시료명으로 시험한 결과로서 유사 대상시료에 적용할 수 없음.

(The test results presented in this report refer only to the object tested.)

2. 이 시험성적서는 승인없이 복사 사용을 금함.

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승인자 (Approved by)

장준용/기술책임자

2688

(Jade Jang / Lab. Technical Manager)

권한자 (Authorized by)

반병오/소장

(Bo Park / Lab. General Manager)

Authenticity check

Intertek Testing Services Korea Ltd.

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## **TEST REPORT**

(시 험 성 적 서)

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시험성적서 번호 (REPORT NO.): RT20R-S6105-006-K1 발행일자 (DATE): 2020. 11. 03.

시료고유번호 (SAMPLE ID NO.) : RT20R-S6105-006

시료명 (SAMPLE DESCRIPTION) : DS-7408

(DS-7408)				
시험항목	단위	분석방법	검출한계	시험결과
(TEST ITEM)	(UNIT)	(TEST METHOD)	(MDL)	(RESULT)
카드뮴 (Cadmium, Cd)	mg/kg	With reference to IEC 62321-5 Edition 1.0 : 2013,	0.5	N.D.
납 (Lead, Pb)	mg/kg	by acid digestion and determined by ICP-OES	5	N.D.
수은 (Mercury, Hg)	mg/kg	With reference to IEC 62321-4 Edition 1.0 : 2013, by acid digestion and determined by ICP-OES	2	N.D.
6가 크롬 (Hexavalent Chromium, Cr <sup>6+</sup> )	mg/kg	With reference to IEC 62321-7-2 Edition 1.0: 2017, by alkaline/toluene digestion and determined by UV-VIS Spectrophotometer	8	N.D.
폴리브롬화비페닐 (Polybrominated Biphen	yls, PBBs)			
모노브로모비페닐 (MonoBB)	mg/kg	]	5	N.D.
다이브로모비페닐 (DiBB)	mg/kg	]	5	N.D.
트라이브로모비페닐 (TriBB)	mg/kg	]	5	N.D.
테트라브로모비페닐 (TertaBB)	mg/kg	With reference to	5	N.D.
펜타브로모비페닐 (PentaBB)	mg/kg	IEC 62321-6 Edition 1.0 : 2015,	5	N.D.
헥사브로모비페닐 (HexaBB)	mg/kg	by solvent extraction and	5	N.D.
헵타브로모비페닐 (HeptaBB)	mg/kg	determined by GC/MS	5	N.D.
옥타브로모비페닐 (OctaBB)	mg/kg		5	N.D.
노나브로모비페닐 (NonaBB)	mg/kg		5	N.D.
데카브로모비페닐 (DecaBB)	mg/kg	]	5	N.D.
폴리브롬화디페닐에테르 (Polybrominated	Diphenyl Ethe	rs, PBDEs)		
모노브로모디페닐에테르 (MonoBDE)	mg/kg		5	N.D.
다이브로모디페닐에테르 (DiBDE)	mg/kg	]	5	N.D.
트라이브로모디페닐에테르 (TriBDE)	mg/kg	1	5	N.D.
테트라브로모디페닐에테르 (TetraBDE)	mg/kg	With reference to	5	N.D.
펜타브로모디페닐에테르 (PentaBDE)	mg/kg	IEC 62321-6 Edition 1.0 : 2015,	5	N.D.
헥사브로모디페닐에테르 (HexaBDE)	mg/kg	by solvent extraction and determined by GC/MS	5	N.D.
헵타브로모디페닐에테르 (HeptaBDE)	mg/kg		5	N.D.
옥타브로모디페닐에테르 (OctaBDE)	mg/kg	]	5	N.D.
노나브로모디페닐에테르 (NonaBDE)	mg/kg	1	5	N.D.
- <del> </del>				

Tested by : Jooyeon Lee, Seulgi Park, Jessica Kang

Notes: mg/kg = ppm = parts per million (함량 표시 : 백만분의 일)

<= Less than (결과 값 이하)

N.D. = Not detected (< MDL, 미검출 – 검출한계 이하)

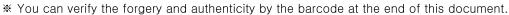
MDL = Method detection limit (검출한계)

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발행면수 (PAGE): 3 of 4 발행일자 (DATE): 2020. 11. 03.

시험성적서 번호 (REPORT NO.): RT20R-S6105-006-K1 시료고유번호 (SAMPLE ID NO.): RT20R-S6105-006

시료명 (SAMPLE DESCRIPTION) : DS-7408

(DS-7408)

\* 시료 접수 시 시료 상태 : (View of sample as received)





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(시 험 성 적 서)

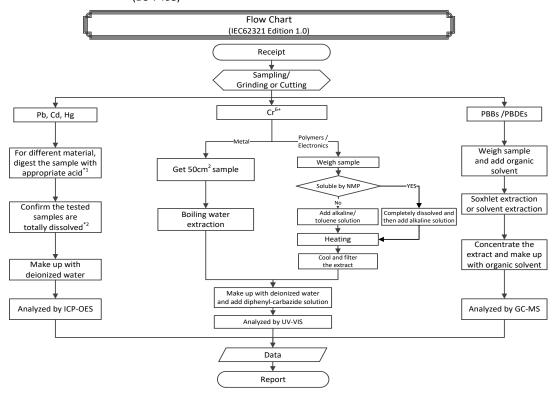
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발행일자 (DATE) : 2020. 11. 03.

시험성적서 번호 (REPORT NO.): RT20R-S6105-006-K1 시료고유번호 (SAMPLE ID NO.): RT20R-S6105-006

시료명 (SAMPLE DESCRIPTION) : DS-7408

(DS-7408)



#### Remarks:

\*1 : List of appropriate acid :

. List of appropriate acid .				
	Material	Acid added for digestion		
	Polymers	HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub> , H3BO <sub>3</sub>		
	Metals	HNO₃, HCl, HF		
	Electronics	HNO <sub>3</sub> , HCl, H <sub>2</sub> O <sub>2</sub> , HBF <sub>4</sub>		

<sup>\*2:</sup> The samples were dissolved totally by pre-conditioning method according to above flow chart.

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

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