

APPLICANT: KOSTIC FORMTEC CO.. LTD.

ADDRESS: 120, LG-ro 360beon-gil, Wollong-myeon,

Paju-si, Gyeonggi-do, Korea

PAGE: 1 of 8

REPORT NO. RT25R-S0403-006-E DATE: Jan. 20, 2025

SAMPLE DESCRIPTION : The following submitted sample(s) said to be:-

NAME/TYPE OF PRODUCT : Release Film
NAME OF MATERIAL : PET, Si

SAMPLE ID NO. : RT25R-S0403-006

ITEM NO. : KBS, KCS, KDS Release Film MANUFACTURER/VENDOR : KOSTIC FORMTEC CO.. LTD.

NAME OF BUYER : LG, SAMSUNG

SAMPLE RECEIVED : Jan. 14, 2025

TESTING DATE : Jan. 14, 2025 ~ Jan. 20, 2025

TEST METHOD(S) : Please see the following page(s).
TEST RESULT(S) : Please see the following page(s).

* Note 1 : The test results presented in this report refer only to the object tested.

* Note 2 : This report shall not be reproduced except in full without the written approval of the testing laboratory.

* Note 3 : The item no. is assigned by client and indicated according to their requirement and guarantee letter.

Approved by,

Authorized by,

2600

Authenticity check

Nikkie Lee / Lab. Technical Manager

Jade Jang / Lab. General Manager

Intertek Testing Services Korea Ltd.











PAGE: 2 of 8

REPORT NO. RT25R-S0403-006-E DATE: Jan. 20, 2025

SAMPLE ID NO. : RT25R-S0403-006 SAMPLE DESCRIPTION : Release Film

TEST ITEM	UNIT	TEST METHOD	MDL	RESULT
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5 Edition 1.0 : 2013,	0.5	N.D.
Lead (Pb)	mg/kg	by acid digestion and determined by ICP-OES	5	N.D.
Mercury (Hg)	mg/kg	With reference to IEC 62321-4 : 2013/AMD1 : 2017, by acid digestion and determined by ICP-OES	2	N.D.
Hexavalent Chromium (Cr ⁶⁺)	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.
Polybrominated Biphenyl (PBBs)	1			
Monobromobiphenyl	mg/kg		5	N.D.
Dibromobiphenyl	mg/kg		5	N.D.
Tribromobiphenyl	mg/kg		5	N.D.
Tetrabromobiphenyl	mg/kg	With reference to	5	N.D.
Pentabromobiphenyl	mg/kg	IEC 62321-6 Edition 1.0 : 2015,	5	N.D.
Hexabromobiphenyl	mg/kg	by solvent extraction and	5	N.D.
Heptabromobiphenyl	mg/kg	determined by GC/MS	5	N.D.
Octabromobiphenyl	mg/kg		5	N.D.
Nonabromobiphenyl	mg/kg		5	N.D.
Decabromobiphenyl	mg/kg		5	N.D.
Polybrominated Diphenyl Ether (F	PBDEs)			
Monobromodiphenyl ether	mg/kg		5	N.D.
Dibromodiphenyl ether	mg/kg		5	N.D.
Tribromodiphenyl ether	mg/kg	With reference to IEC 62321-6 Edition 1.0 : 2015, by solvent extraction and	5	N.D.
Tetrabromodiphenyl ether	mg/kg		5	N.D.
Pentabromodiphenyl ether	mg/kg		5	N.D.
Hexabromodiphenyl ether	mg/kg		5	N.D.
Heptabromodiphenyl ether	mg/kg	determined by GC/MS	5	N.D.
Octabromodiphenyl ether	mg/kg		5	N.D.
Nonabromodiphenyl ether	mg/kg		5	N.D.
Decabromodiphenyl ether	mg/kg		5	N.D.

Tested by : Jooyeon Lee, Chano Kim, Hayan Park

Notes: mg/kg = ppm = parts per million

< = Less than

N.D. = Not detected (<MDL)
MDL = Method detection limit

Intertek Testing Services Korea Ltd.







PAGE: 3 of 8

REPORT NO. RT25R-S0403-006-E DATE: Jan. 20, 2025

SAMPLE ID NO. : RT25R-S0403-006 SAMPLE DESCRIPTION : Release Film

TEST ITEM	UNIT	TEST METHOD	MDL	RESULT
Bromine (Br)	mg/kg	With reference to EN 14582, by oxygen combustion with bomb and determined by IC	30	N.D.
Chlorine (Cl)	mg/kg	With reference to EN 14582, by oxygen combustion with bomb and determined by IC	30	N.D.
Fluorine (F)	mg/kg	With reference to EN 14582, by oxygen combustion with bomb and determined by IC	30	N.D.
lodine (I)	mg/kg	With reference to EN 14582, by oxygen combustion with bomb and determined by IC	30	N.D.
Beryllium (Be)	mg/kg	With reference to US EPA 3052, by acid digestion and determined by ICP-OES	2	N.D.
Antimony (Sb)	mg/kg	With reference to US EPA 3052, by acid digestion and determined by ICP-OES	2	131

Tested by : Chano Kim, Jooyeon Lee

Notes: mg/kg = ppm = parts per million

< = Less than

N.D. = Not detected (<MDL)
MDL = Method detection limit









PAGE: 4 of 8

REPORT NO. RT25R-S0403-006-E DATE: Jan. 20, 2025

SAMPLE ID NO. : RT25R-S0403-006 SAMPLE DESCRIPTION : Release Film

TEST ITEM	CAS NO.	UNIT	TEST METHOD	MDL	RESULT
Dibutyl phthalate (DBP)	84-74-2	mg/kg	With reference to IEC 62321-8 Edition 1.0 : 2017,	50	N.D.
Di(2-ethylhexyl) phthalate (DEHP)	117-81-7	mg/kg		50	N.D.
Benzyl butyl phthalate (BBP)	85-68-7	mg/kg	by solvent extraction and determined by GC/MS	50	N.D.
Diisobutyl phthalate (DIBP)	84-69-5	mg/kg		50	N.D.

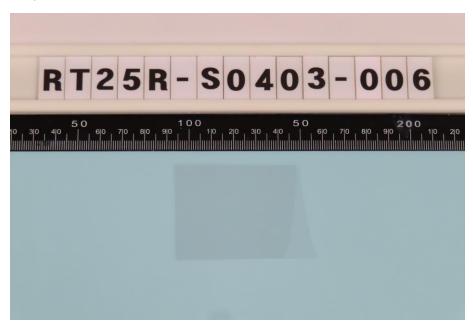
Tested by: Hayan Park

Notes: mg/kg = ppm = parts per million

< = Less than

N.D. = Not detected (<MDL)
MDL = Method detection limit

* View of sample as received;-



Intertek Testing Services Korea Ltd.









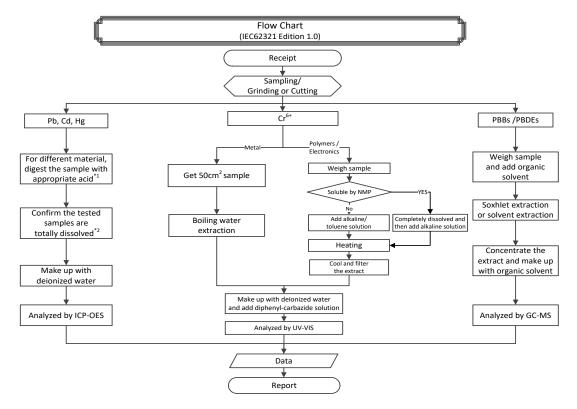


PAGE: 5 of 8

REPORT NO. RT25R-S0403-006-E

DATE: Jan. 20, 2025

SAMPLE ID NO. : RT25R-S0403-006 SAMPLE DESCRIPTION: Release Film



Remarks:
*1: List of appropriate acid:

-	Elst of appropriate acia:					
	Material	Acid added for digestion				
	Polymers	HNO₃, HCl, HF, H ₂ O ₂ , H3BO₃				
	Metals	HNO₃, HCl, HF				
	Electronics	HNO ₃ , HCl, H ₂ O ₂ , HBF ₄				

^{*2 :} The samples were dissolved totally by pre-conditioning method according to above flow chart.













PAGE: 6 of 8

DATE: Jan. 20, 2025

REPORT NO. RT25R-S0403-006-E

SAMPLE ID NO. : RT25R-S0403-006 SAMPLE DESCRIPTION : Release Film

Receipt

Sample preparation

Sample weighing

Bomb preparation

Oxygen bomb combustion

Cooling, for 1hr

Absorption solvent
preparation of absorption solution

Collection of halides
make up Vol. 100mL

Analyzed by IC

Data

Report

Intertek Testing Services Korea Ltd.









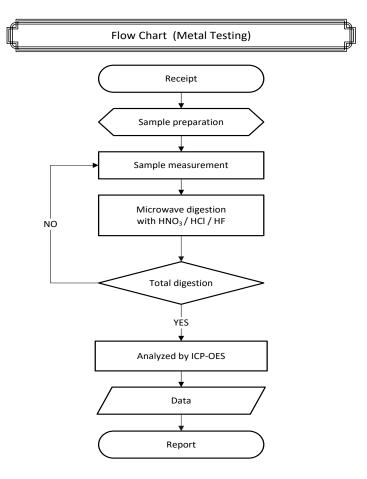


PAGE: 7 of 8

REPORT NO. RT25R-S0403-006-E

DATE: Jan. 20, 2025

SAMPLE ID NO. : RT25R-S0403-006 SAMPLE DESCRIPTION : Release Film



^{**} Remarks : The samples were dissolved totally by pre-conditioning method according to above flow chart.

Intertek Testing Services Korea Ltd.











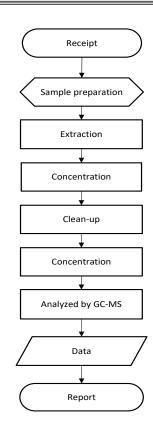
PAGE: 8 of 8

REPORT NO. RT25R-S0403-006-E

DATE: Jan. 20, 2025

SAMPLE ID NO. : RT25R-S0403-006 SAMPLE DESCRIPTION : Release Film

Flow Chart (Phthalates)



**** End of Report ****

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: http://www.intertek.com/terms/. Intertek's responsibility and liability are limited to the terms and conditions of the agreement.

This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk.

This report shall not be reproduced, except in full. This report is not related to the scope of Korea Laboratory Accreditation Scheme.

Intertek Testing Services Korea Ltd.



