

Applicant : DUCKSUNG HITECH CO., LTD.

Address : #225-2, Shinneung-ri, Seoun-myeon, Anseong-si, Gyeonggi-do, Korea

		Page: 1 of 4
Report No. RT12R-U0024-	Date: Jan. 17, 2012	
Sample Description	: The following submitted sample(s	aid to be:-
Name/Type of Product	: PVC Insulation Tape[VTF]	
	: RT12R-U0024-046	
Sample ID No.		
Item No.	: 270D	
Manufacturer/Vender	: DUCKSUNG HITECH CO., LTD.	
Sample received	: Jan. 07, 2012	
Testing Date	: Jan. 07, 2012 ~ Jan. 17, 2012	
Testing Environment	: Temperature : ( 24 $\pm$ 2 ) $^\circ\!$	Humidity : ( 60 ± 5 ) % R.H.
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 relate 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,

mpt

E.Y.Lee / Lab. Technical Manager

Authorized by,

H.W.Yoo / Lab. General Manager

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### Intertek Testing Services Korea Ltd.

Seoul Office: Tel : 02-6090-9500 Fax : 02-3409-0026 Daegu Office : Tel : 053-600-8647 Fax : 053-600-8645 Web Site : <u>www.Intertek.co.kr</u> Seoul Lab. Address : 1/F, A-ju Digital Tower, #284-56, Seongsu 2-ga, Seongdong-Gu, Seoul, 133-833 Korea Ulsan Lab. Address : #340-2, Yongam-Ri, Chongryang-Myun, Ulju-Gun, Ulsan 689-865 Korea



#### Report No. RT12R-U0024-046-E

Page: 2 of 4 Date: Jan. 17, 2012

Sample ID No. : RT12R-U0024-046 Sample Description : PVC Insulation Tape[VTF]

Test Item	Unit	Test Method	MDL	Result	
Cadmium (Cd)	mg/kg	With reference to US EPA 3052, by acid digestion and determined by ICP-OES	0.5	3.3	
Lead (Pb)	mg/kg	With reference to US EPA 3052, by acid digestion and determined by ICP-OES	5	N.D.	
Mercury (Hg)	mg/kg	With reference to US EPA 3052, by acid digestion and determined by ICP-OES	2	N.D.	
Hexavalent Chromium (Cr <sup>6+</sup> )	mg/kg	With reference to US EPA 3060A and determined by UV-VIS Spectrophotometer	1	N.D.	
Polybrominated Biphenyl (PBBs)	r			1	
Monobromobiphenyl	mg/kg		5	N.D.	
Dibromobiphenyl	mg/kg		5	N.D.	
Tribromobiphenyl	mg/kg		5	N.D.	
Tetrabromobiphenyl	mg/kg		5	N.D.	
Pentabromobiphenyl	mg/kg	With reference to US EPA 3540C, by solvent extraction	5	N.D.	
Hexabromobiphenyl	mg/kg	and determined by GC/MS	5	N.D.	
Heptabromobiphenyl	mg/kg	and determined by Cerris	5	N.D.	
Octabromobiphenyl	mg/kg		5	N.D.	
Nonabromobiphenyl	mg/kg		5	N.D.	
Decabromobiphenyl	mg/kg		5	N.D.	
Polybrominated Diphenyl Ether (PBDEs)					
Monobromodiphenyl ether	mg/kg		5	N.D.	
Dibromodiphenyl ether	mg/kg		5	N.D.	
Tribromodiphenyl ether	mg/kg		5	N.D.	
Tetrabromodiphenyl ether	mg/kg		5	N.D.	
Pentabromodiphenyl ether	mg/kg	With reference to US EPA 3540C, by solvent extraction	5	N.D.	
Hexabromodiphenyl ether	mg/kg	and determined by GC/MS	5	N.D.	
Heptabromodiphenyl ether	mg/kg		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 : YK Cho, HJ Kim, MB Song

Notes : mg/kg = ppm = parts per million < = Less than N.D. = Not detected ( <MDL ) MDL = Method detection limit

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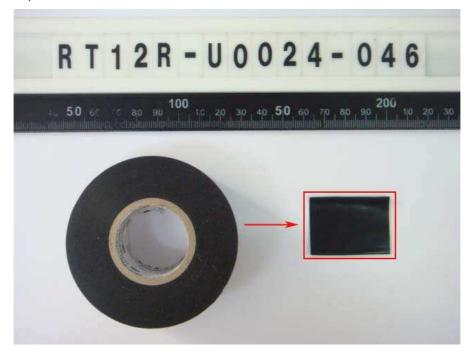
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Report No. RT12R-U0024-046-E

Sample ID No. : RT12R-U0024-046 Sample Description : PVC Insulation Tape[VTF]

\* View of sample as received;-



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Report No. RT12R-U0024-046-E

Sample ID No. : RT12R-U0024-046 Sample Description : PVC Insulation Tape[VTF] Page: 4 of 4 Date: Jan. 17, 2012

Flow Chart (EPA 3052 for Cd, Pb, Hg / EPA 3060A for Cr<sup>6+</sup> / EPA 3540C for PBB/PBDE) Receipt Sample preparation Sample measurement NO Pb, Cd, Hg Cr<sup>6+</sup> PBB/PBDE Add digestion solution (NaOH/Na<sub>2</sub>CO<sub>3</sub>) Soxhlet extraction with Microwave digestion phosphate buffer Toluene more than 10 hrs with HNO3 / HCI / HF (K<sub>2</sub>HPO<sub>4</sub>/KH<sub>2</sub>PO<sub>4</sub>),  $MgCl_2$ Heating 95°C and stirring Concentraction for 60 minutes Toluene Cool, filter digestate Total digestion Analyzed by GC/MS through filter paper Dilution While stirring, adjust filtrate to appropriate final pH by Overrange calibration YĖS YES dropwise addition of curve . HNO<sub>3</sub>/H<sub>2</sub>SO<sub>4</sub> Analyzed by ICP-OES Analyzed by UV-VIS NO Data Report

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

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

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