

UNITY OPTO TECHNOLOGY CO., LTD.Report No. : CE/2005/7093410F, NO. 88-8, SEC. 1, KUANG-FU RD., SANCHUNG CITY,
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The following merchandise was (were) submitted and identified by the client as :

<u>Type of Product</u>	:	LED
<u>Style/Item No</u>	:	MSL-5XXZW
Sample Received	:	2005/07/05
<u>Testing Date</u>	:	2005/07/05 TO 2005/07/13

<u>Test Result</u>

: - Please see the next page -

Operation Manager

Signed for and on behalf of SGS TAIWAN LTD.



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Test Result

PART NAME NO.1

: MIXED ALL PARTS (PLEASE REFER TO THE PHOTO ATTACHED)

Track Idams (a).	Unit	Method	MDL	Result	Smaa
Test Item (s):	Unit	Method	MDL	No.1	Spec.
1,1,2-Trichloroethane	ppm	With reference to SGS in- house method. Analysis was performed by GC/MS linked Headspace	1	N.D.	-
1,1-Dichloroethane	ppm	With reference to SGS in- house method. Analysis was performed by GC/MS linked Headspace	1	N.D.	-
1,2-Dichloroethane	ppm	With reference to SGS in- house method. Analysis was performed by GC/MS linked Headspace	1	N.D.	-
1,2-Dichloroethylene	ppm	With reference to SGS in- house method. Analysis was performed by GC/MS linked Headspace	1	N.D.	-

Test Item (s):	TT 1 4	Mr. (1) - 1	MDI	Result	0
	Unit	Method	MDL	No.1	Spec.
Asbestos					
Anthrophyllite(CAS NO.017068-78-9)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative	-
Crocidolite(CAS NO.012001- 28-4)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative	-
Amosite(CAS NO.012172-73- 5)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative	-
Tremolite(CAS NO.014567- 73-8)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative	-



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Test Item (s):	Unit Method	MDL	Result	Smaa	
		Method	WIDL	No.1	Spec.
Chrysotile(CAS NO.012001- 29-5)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative	-
Actinolite(CAS NO.013768- 00-8)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative	-

Test Item (s):	Unit	Mathad	MDL	Result	Smaa
	ome	Method	MDL	No.1	Spec.
AZO		As per LMBG 8202-2			
4-AMINODIPHENYL (CAS NO.92-67-1)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
BENZIDINE (CAS NO.92- 87-5)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
4-CHLORO-O-TOLUIDINE (CAS NO.95-69-2)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
2-NAPHTHYLAMINE (CAS NO.91-59-8)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
O-AMINOAZOTOLUENE (CAS NO.97-56-3)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
2-AMINO-4-NITROTOLUENE (CAS NO.99-55-8)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
P-CHLOROANILINE (CAS NO.106-47-8)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
2,4-DIAMINOANISOLE (CAS NO.615-05-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
4,4- DIAMINODIPHENYLMETHA NE (CAS NO.101-77-9)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
3,3-DICHLOROBENZIDINE (CAS NO.91-94-1)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
3,3-DIMETHOXYBENZIDINE (CAS NO.119-90-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	-



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Test Item (s):	T T 1 4	NF-11-1	MDI	Result	0
	Unit	Method	MDL	No.1	Spec.
3,3-DIMETHYLBENZIDINE (CAS NO.119-93-7)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
3,3-DIMETHYL-4,4- DIAMINODIPHENYLMETHA NE (CAS NO.838-88-0)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
P-CRESIDINE(2-METHOXY- 5-METHYLANILINE) (CAS NO.120-71-8)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
4,4-METHYLENE-BIS-(2- CHLORANILINE) (CAS NO.101-14-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
4,4-OXYDIANILINE (CAS NO.101-80-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
4,4-THIODIANILINE (CAS NO.139-65-1)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
O-TOLUIDINE (CAS NO.95- 53-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
2,4-TOLUYLENDIAMINE (CAS NO.95-80-7)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
2,4,5-TRIMETHYLANILINE (CAS NO.137-17-7)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
O-ANISIDINE (CAS NO.90- 04-0)	ppm	Analysis was performed by GC/MS.	3	N.D.	-
P-AMINOAZOBENZENE (CAS NO.60-09-3)	ppm	Analysis was performed by GC/MS.	3	N.D.	-

Test Item (s):	TTesit	Unit Method	MDI	Result	Smaa
	Unit	Method	MDL	No.1	Spec.
CFC's(Chlorofluorocarbons)		With reference to US EPA 8260.			
Group I					
Chlorofluorocarbon-11(CAS No:000075-69-4)		Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.	-



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Result Test Item (s): Unit Method MDL Spec. No.1 Chlorofluorocarbon-12(CAS Analysis was performed by ppm 1 N.D. No:000075-71-8) GC/MS. [CFC's (Chlorofluorocarbons)] Chlorofluorocarbon-113(CAS 1 N.D. Analysis was performed by ppm No:000076-13-1) GC/MS. [CFC's (Chlorofluorocarbons)] Chlorofluorocarbon-114(CAS Analysis was performed by ppm 1 N.D. No:000076-14-2) GC/MS. [CFC's (Chlorofluorocarbons)] Chlorofluorocarbon-115(CAS ppm Analysis was performed by 1 N.D. No:000076-15-3) GC/MS. [CFC's (Chlorofluorocarbons)] Group III Chlorofluorocarbon-13(CAS Analysis was performed by 1 ppm N.D. No:000075-72-9) GC/MS. [CFC's (Chlorofluorocarbons)] Analysis was performed by 1 Chlorofluorocarbon-111(CAS N.D. ppm No:000354-56-3) GC/MS. [CFC's (Chlorofluorocarbons)] Analysis was performed by Chlorofluorocarbon-112(CAS ppm 1 N.D. _ No:000076-12-0) GC/MS. [CFC's (Chlorofluorocarbons)] Chlorofluorocarbon-211(CAS Analysis was performed by 1 N.D. ppm No:135401-87-5) GC/MS. [CFC's (Chlorofluorocarbons)] Chlorofluorocarbon-212(CAS Analysis was performed by 1 N.D. ppm No:076564-99-3) GC/MS. [CFC's (Chlorofluorocarbons)] Chlorofluorocarbon-213(CAS Analysis was performed by 1 N.D. ppm No:060285-54-3) GC/MS. [CFC's (Chlorofluorocarbons)] Chlorofluorocarbon-214(CAS Analysis was performed by 1 N.D. ppm _ No:002268-46-4) GC/MS. [CFC's (Chlorofluorocarbons)]



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Track Idam (a):	Unit	Unit Method	MDL	Result	Smoo
Test Item (s):	Unit	Method	MDL	No.1	Spec.
Chlorofluorocarbon-215(CAS No:000076-17-5)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.	-
Chlorofluorocarbon-216(CAS No:001652-80-8)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.	-
Chlorofluorocarbon-217(CAS No:000422-86-6)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.	-

Test Item (s):	Unit	Method	MDL	Result	Spec.
	Unit	Method	WIDL	No.1	spec.
CHC's(Chlorinated hydrocarbon)		With reference to US EPA 8260.			
1,1,1,2- Tetrachloroethane(CAS No.:000630-20-6)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,1,1-Trichloroethane(CAS No.:000071-55-6)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,1,2,2- Tetrachloroethane(CAS No.:000079-34-5)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,1,2-Trichloroethane(CAS No.:000079-00-5)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,1-Dichloroethane(CAS No.:000075-35-4)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,1-Dichloroethane(CAS No.:000075-35-3)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,1-Dichloropropene(CAS No.:000563-58-6)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-



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	TT. 1	MPI	Result		
Test Item (s):	Unit	Method	MDL	No.1	Spec.
1,2,3-Trichloropropane(CAS No.:000096-19-5)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,2-Dichloroethane(CAS No.:000107-06-2)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,2-Dichloropropane(CAS No.:000078-87-5)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
1,3-Dichloropropane(CAS No.:000142-28-9)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
2,2-Dichloropropane(CAS No.:000594-20-7)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Carbon tetrachloride(CAS No:000056-23-5)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Chloroethane(CAS No.:000075-00-3)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Chloroform(CAS No.:000067-66-3)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Chloromethane(CAS No.:000074-87-3)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Cis-1,2-Dichloroethene(CAS No.:000156-59-2)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Cis-1,3- Dichloropropene(CAS No.:010061-01-5)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Hexachlorobutadiene(CAS No.:000087-68-3)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-



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	TT 14	Math a d	MDI	Result	0
Test Item (s):	Unit	Method	MDL	No.1	Spec.
Methylene Chloride(CAS No.:000075-09-2)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Tetrachloroethene(CAS No.:000127-18-4)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
trans-1,2- Dichloroethene(CAS No.:000156-60-5)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
trans-1,3- Dichloropropene(CAS No.:010061-02-6)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-
Trichloroethylene(CAS No.:000079-01-6)	ppm	Analysis was performed by GC/MS. [CHC's (Chlorinated hydrocarbon)]	1	N.D.	-

Test Item (s):	IInit	Method	MDL	Result	Smoo
	Unit	Method		No.1	Spec.
Chloroform		Analysis was performed by GC/MS.	1	N.D.	-

Test Item (s):	TT \$4	36.41.41	MDI	Result	0
	Unit Method	MDL	No.1	Spec.	
Chlorinated Paraffin (C10~C13) (CAS NO:010871- 26-2)		With reference to USEPA3540C or USEPA3550C. Analysis was performed by GC/MS or GC/ECD.	0.01	N.D.	-

Test Item (s):	TTeste	Unit Method	MDI	Result	Smoo
	Unit		MDL	No.1	Spec.
Dichloromethane		With reference to US EPA 5021. Analysis was performed by GC/MS linked Headspace.	1	N.D.	-



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		M. (1. A	WDI	Result	0
Test Item (s):	Unit	Method	MDL	No.1	Spec.
Dieldrin	ppm	With reference to US EPA 8270D. Analysis was performed by GC/MS linked Headspace.	0.5	N.D.	-
DDT	ppm	With reference to US EPA 8270D. Analysis was performed by GC/MS linked Headspace.	0.5	N.D.	-
Chlordane	ppm	With reference to US EPA 8270D. Analysis was performed by GC/MS linked Headspace.	0.5	N.D.	-
Aldrin	ppm	With reference to US EPA 8270D. Analysis was performed by GC/MS linked Headspace.	0.5	N.D.	-
Hexachlorobenzenes	ppm	With reference to US EPA 8270D. Analysis was performed by GC/MS linked Headspace.	0.5	N.D.	-
Endrin	ppm	With reference to US EPA 8270D. Analysis was performed by GC/MS linked Headspace.	0.5	N.D.	-

Test Item (s):	Unit	Unit Method	MDL Result No.1	Result	Smaa
	Unit	Method		No.1	Spec.
Formaldehyde(CAS No:000050-00-0)		With reference to DIN 53315 & USEPA 8315A. Analysis was performed by HPLC/DAD/MS	0.2	N.D.	_



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Test Item (s):	TT !4		MDL	Result	0
	Unit	Method	MDL	No.1	Spec.
Halon		With reference to US EPA 8260.			
Halon-1211	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.	-
Halon-1301	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.	-
Halon-2402	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.	-

Test Item (s):	TT :4	Mathad	MDI	Result	Smaa
	Unit	Method	MDL	No.1	Spec.
HBFC		With reference to 3093/94/EEC. Analysis was performed by GC/MS.	1	N.D.	-

Tract Hears (a)	Unit	Method	MDL	Result	Smaa
Test Item (s):	Unit	Method	MDL	No.1	Spec.
HCFC's(Hydrogenated chlorofluorocarbons)		With reference to US EPA 8260.			
Hydrochlorofluorocarbon- 21(CAS No.:000075-43-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 22(CAS No.:000075-45-6)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 31(CAS No.:000593-70-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-



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Toot Itom (a):	TTes !4	Math - 4	MDI	Result	Sector
Test Item (s):	Unit	Method	MDL	No.1	Spec.
Hydrochlorofluorocarbon- 121(CAS No.:000354-14-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 122(CAS No.:000354-21-2)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 123(CAS No.:000306-83-1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 124(CAS No.:002837-89-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 131(CAS No.:000359-28-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	_
Hydrochlorofluorocarbon- 131b(CAS No.:000471-43-2)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 133a(CAS No.:000075-88-7)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 141b(CAS No.:001717-00-6)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-



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Tost Itom (a).	TT !4	Method	MDI	Result	Sec.
Test Item (s):	Unit	Metnoa	MDL	No.1	Spec.
Hydrochlorofluorocarbon- 221	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 222(CAS No.:000422-30-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 223	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 224	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 225ca(CAS No.:000422-56- 0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 225cb(CAS No.:000507-55- 1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 226(CAS No.:000431-87-8)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 231	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-

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Test Item (a).	TT !4	Method	MDI	Result	Sec.
Test Item (s):	Unit	метпоа	MDL	No.1	Spec.
Hydrochlorofluorocarbon- 232	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 233	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 234	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 235(CAS No.:013838-16-9)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 241	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 242	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 243(CAS No.:000338-75-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 244	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-

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Tost Itom (s):	TT \$4	Weth ed	MDI	Result	0
Test Item (s):	Unit	Method	MDL	No.1	Spec.
Hydrochlorofluorocarbon- 251	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 252	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 253(CAS No.:000354-06-1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 261(CAS No.:000420-97-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 262(CAS No.:000420-97-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-
Hydrochlorofluorocarbon- 271	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.	-

Test Item (s):	Unit	Method	MDL	Result	Smoo
	Unit	Method	MDL	No.1	Spec.
Hydrofluorcarbon, fluorinated hydrocarbon, fluorohydrocarbon		With reference to US EPA 8260.			
HFC-23(CHF3)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-23(CHF3)	ppm	Analysis was performed by GC/MS.	1	N.D.	-



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Test Item (s):	TT \$4	Method	MDI	Result	C = = = =
	Unit	metnod	MDL	No.1	Spec.
HFC-41(CH3F)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-43-10mee(C5H2F10)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-125(C2HF5)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-134(C2H2F4)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-134a(CH2FCF3)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-143(CH3F3)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-143a(CH3F3)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-152a(C2H4F2)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-227ea(C3HF7)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-236fa(C3H2F6)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-236ea(C3H2F6)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-245ca(C3H3F5)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-245fa(C3H3F5)	ppm	Analysis was performed by GC/MS.	1	N.D.	-
HFC-365mfc(C4H5F5)	ppm	Analysis was performed by GC/MS.	1	N.D.	-



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PASS

Test Item (s):	TTeste	Unit Method	MDI	Result	Sman
	Unit	Method	MDL	No.1	Spec.
Ni Emission		This is screening method and is based on the formation of a red complex when nickel ions come in contact with dimethyglyoxime solution in the presence of ammonia. In order to increase the sensitivity of the test pretreatment with artificial sweat and heat	< 0.5	< 0.5	< 0.5

Test Item (s):	Unit	Method	MDL	Result	Smaa
	Unit	Method	WIDL	No.1	Spec.
1,1,1-trichoroethane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS.	1	N.D.	-
Carbon tetrachloride	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
Bromomethane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-

Test Item (s):	IImit	Unit Method	MDL	Result	Smaa
	Unit	Method	WIDL	No.1	Spec.
Organic-tin coumpounds					
Triphenyl Tin(TPT)(CAS NO:000668-34-8)	ppm	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	N.D.	-
Tributyl Tin(TBT)	ppm	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	N.D.	-



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Test Item (s):	TT \$4		MDI	Result	0
	Unit Method	MDL	No.1	Spec.	
PCBs(Polychlorinated Biphenyls)(CAS NO:001336- 36-3)		With reference to USEPA 8082A. Analysis was performed by GC/MS or GC/ECD.	0.5	N.D.	-

Test Item (s):	TT 14	Wedled	MDI	Result	0
	Unit	Method	MDL	No.1	Spec.
Polychlorinated Naphthalene		With reference to USEPA 8081B. Analysis was performed by GC/MS.	5	N.D.	-

Tost Itom (s):	TT 34	Method	MDL	Result	0
Test Item (s):	Unit	Method	MDL	No.1	Spec.
PFC		With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.			
F14	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
Fluorocarbon 116	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
Freon 218	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
Decafluorobutane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-



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Test Item (s):	TT !+	Mathad	MDI	Result	Smaa
	Unit	Method	MDL	No.1	Spec.
Freon C318	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
Perfluor-1-butane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
perfluorisobutane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
1,4-dihydroctafluorobutane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
nonafluor-2- (trifluorpmethyl)butane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
perfluoro-n-pentane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	_
2-perfluoromethylpentane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-
perfluorohexane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.	-



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Toot Itom (a)				Result	
Test Item (s):	Unit	Method	MDL	No.1	Spec.
Phthalates					
DBP(Di-butyl phthalate)(CAS No.000084-74-2)	%	GC/MS after sample was analyzed by GC/MS with the procedure outline in ASTM D3421-75 " Extraction and Analysis of Plasticizer Mixture from Vinyl Chloride Plastics ".	0.01	N.D.	-
DINP(Di-isononyl phthalate)(CAS No.028553- 12-0)	%	GC/MS after sample was analyzed by GC/MS with the procedure outline in ASTM D3421-75 " Extraction and Analysis of Plasticizer Mixture from Vinyl Chloride Plastics ".	0.1	N.D.	-
DEHP(Di-(2-ethylhexyl phthalate))(CAS No.000117- 81-7)	%	GC/MS after sample was analyzed by GC/MS with the procedure outline in ASTM D3421-75 " Extraction and Analysis of Plasticizer Mixture from Vinyl Chloride Plastics ".	0.003	N.D.	-
DIDP(Di-isodecyl phthalate)(CAS No.026761- 40-0)	%	GC/MS after sample was analyzed by GC/MS with the procedure outline in ASTM D3421-75 " Extraction and Analysis of Plasticizer Mixture from Vinyl Chloride Plastics ".	0.1	N.D.	-
DNOP(Di-n-octyl phthalate)(CAS No.000117- 84-0)	%	GC/MS after sample was analyzed by GC/MS with the procedure outline in ASTM D3421-75 " Extraction and Analysis of Plasticizer Mixture from Vinyl Chloride Plastics ".	0.01	N.D.	-



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Test Item (s):	Unit	Method	MDL	Result	Smoo
	Unit	Method	MDL	No.1	Spec.
BBP(Benzyl butyl phthalate)(CAS No.000085- 68-7)		GC/MS after sample was analyzed by GC/MS with the procedure outline in ASTM D3421-75 " Extraction and Analysis of Plasticizer Mixture from Vinyl Chloride Plastics ".	0.01	N.D.	-

	TT 34	Wedthe d	MDL	Result	0
Test Item (s):	Unit	Method	MDL	No.1	Spec.
Monobromobiphenyl	%		0.0005	N.D.	-
Dibromobiphenyl	%		0.0005	N.D.	-
Tribromobiphenyl	%		0.0005	N.D.	-
Tetrabromobiphenyl	%	With reference to	0.0005	N.D.	-
Pentabromobiphenyl	%	USEPA3540C or	0.0005	N.D.	-
Hexabromobiphenyl	%	USEPA3550C. Analysis was performed by HPLC/DAD,	0.0005	N.D.	-
Heptabromobiphenyl	%	LC/MS or GC/MS.	0.0005	N.D.	-
Octabromobiphenyl	%	(prohibited by 2002/95/EC	0.0005	N.D.	-
Nonabromobiphenyl	%	(RoHS), 83/264/EEC, and	0.0005	N.D.	-
Decabromobiphenyl	%	76/769/EEC)	0.0005	N.D.	-
Total PBBs (Polybrominated biphenyls)/Sum of aboye	%		-	N.D.	-
Monobromobiphenyl ether	%		0.0005	N.D.	-
Dibromobiphenyl ether	%		0.0005	N.D.	-
Tribromobiphenyl ether	%		0.0005	N.D.	-
Tetrabromobiphenyl ether	%	With reference to	0.0005	N.D.	-
Pentabromobiphenyl ether	%	USEPA3540C or	0.0005	N.D.	-
Hexabromobiphenyl ether	%	USEPA3550C. Analysis was	0.0005	N.D.	-
Heptabromobiphenyl ether	%	performed by HPLC/DAD,	0.0005	N.D.	-
Octabromobiphenyl ether	%	LC/MS or GC/MS. (prohibited by 2002/95/EC	0.0005	N.D.	-
Nonabromobiphenyl ether	%	(RoHS), 83/264/EEC, and	0.0005	N.D.	-
Decabromobiphenyl ether	%	76/769/EEC)	0.0005	N.D.	-
Total PBBEs(PBDEs)(Polybromin ated biphenyl ethers)/Sum of above	%		-	N.D.	-

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Toot Itom (a).	Unit	Method	MDL	Result	Smaa
Test Item (s):	ome	Method	MIDL	No.1	Spec.
Halogen		As per EN14582 method B.			
Halogen-Chlorine (Cl)(CAS No:007782-50-5)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.	-
Halogen-Fluorine (F)(CAS No:007782-41-4)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.	-
Halogen-Bromine (Br)(CAS No:007726-95-6)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.	-
Halogen-Iodine (I)(CAS No:007553-56-2)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.	-

Test Item (s):	Unit	Method	MDL	Result	Spec.
				No.1	
Trichloroethylene	ppm	Analysis was performed by GC/MS linked Headspace.	1	N.D.	-
Tetrachloroethylene	ppm	Analysis was performed by GC/MS linked Headspace.	1	N.D.	-



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Test Item (s):	TT \$4	Mathad	MDL	Result No.1	Spec.
	Unit	Method			
Chromium VI (Cr+6)	ppm	UV-VIS after reference to US EPA 3060A.	2	N.D.	-
Arsenic (As)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.	-
Beryllium (Be)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-
Bismuth (Bi)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.	-
Cobalt (Co)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-
Chromium (Cr)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.	-
Nickel (Ni)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	236.7	-
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-
Antimony (Sb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-
Selenium (Se)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.	-



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Test Item (s):	Unit	Method	MDL	Result	Spec.
				No.1	
Tellurium (Te)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-
Thallium (Tl)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.	-

- NOTE: (1) N.D. = Not detected (<MDL)
 - (2) ppm = mg/kg
 - (3) MDL = Method Detection Limit
 - (4) " " = No Regulation
 - (5) " --- " = Not Applicable
 - (6) * = Results shown are of the adjusted analytical results
 - (7) ** = Qualitative analysis (No Unit)
 - (8) Negative = Undetectable / Positive = Detectable
 - (9) The MDL is 5ppm for the single compound of CP



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