

Test Report

Testing institute : Product Technology Service (Ningbo) Co., Ltd.
6&7F, 59#, Huayu Road, Yinzhou District, Ningbo 315192 P.R.China

Sample Name : PVC film

Sample Description : White

Model/Type : /

Material : /

Testing location : Product Technology Service (Ningbo) Co., Ltd.

Test specification(s) : 29 Substances of Very High Concern (SVHC)
Based on the list published by ECHA on 2008 Oct 9 and 2009 Dec 07 ,
regarding Regulation (EC) No 1907/2006 concerning the REACH.

Result Summary : The concentrations of substances are less than 0.1% in submitted
sample



Authorized signature : Waterson Liu

The test results exclusively refer to the samples examined. This report shall not be reproduced except in full without written approval and does not authorize the use of Product Technology Service (Ningbo) Co., Ltd. label

Test result(s)

Tested sample: PVC film

The first 15 items list:	EC No.	CAS No.	Equipment	Result (%)
Anthracene	204-371-1	120-12-7	GC-MS	ND
4,4'-Diaminodiphenylmethane	202-974-4	101-77-9	GC-MS	ND
Dibutyl phthalate (DBP)	201-557-4	84-74-2	GC-MS	ND
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2	GC-MS	ND
Bis (2-ethyl(hexyl)phthalate) (DEHP)	204-211-0	117-81-7	GC-MS	ND
Hexabromocyclododecane (HBCDD, α,β,γ) and all major diastereoisomers identified	247-148-4 221-695-9	25637-99-4 3194-55-6	GC-MS	ND
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	GC-MS	ND
Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	GC-MS	ND
Bis(tributyltin)oxide *	200-268-0	56-35-9	GC-MS	ND
Cobalt dichloride *	231-589-4	7646-79-9	ICP/IC	ND
Diarsenic pentaoxide *	215-116-9	1303-28-2	ICP-OES	ND
Diarsenic trioxide *	215-481-4	1327-53-3	ICP-OES	ND
Triethyl arsenate *	427-700-2	15606-95-8	ICP-OES	ND
Lead hydrogen arsenate *	232-064-2	7784-40-9	ICP-OES	ND
Sodium dichromate, dihydrate *	234-190-3	7789-12-0 10588-01-9	ICP/ UV-Vis	ND
The Second 14 items list:				
Anthracene oil**	292-602-7	90640-80-5	GC-MS	ND
Anthracene oil,anthracene paste, distn.Lights**	295-278-5	91995-17-4	GC-MS	ND
Anthracene oil, anthracene paste, anthracene fraction **	295-275-9	91995-15-2	GC-MS	ND
Anthracene oil, anthracene-low **	292-604-8	90640-82-7	GC-MS	ND
Anthracene oil, anthracene paste **	292-603-2	90640-81-6	GC-MS	ND
Pitch, coal tar, high temp. **	266-028-2	65996-93-2	GC-MS	ND
Aluminosilicate Refractory Ceramic Fibres ***	Index number: 650-017-00-8		ICP/FTIR	ND
Zirconia Aluminosilicate, Refractory Ceramic Fibres ***	Index number: 650-017-00-8		ICP/FTIR	ND
2,4-Dinitrotoluene (DNT)	204-450-0	121-14-2	GC-MS	ND
Diisobutyl phthalate (DIBP)	201-553-2	84-69-5	GC-MS	ND
Lead chromate ***	231-846-0	7758-97-6	ICP-OES	ND
Lead chromate molybdate sulphate red (C.I. Pigment Red 104) ***	235-759-9	12656-85-8	ICP-OES	ND
Lead sulfochromate yellow (C.I. Pigment Yellow 34) ***	215-693-7	1344-37-2	ICP-OES	ND
tris(2-chloroethyl)phosphate(TCEP)	204-118-5	115-96-8	GC-MS	ND

Result Summary:

According to the analytical results, concentration of substances are less than 0.1%(w/w) in sample(s).

Regulation Articles: According to Articles 33 of the REACH, if a substance meets the criteria in article 57 and is identified in according with article 59(1), a concentration above 0.1%(w/w) shall provide the consumer with sufficient information, available to supplier, to allow safe use of the article including, as a minimum, the name of substance; The EU & EEA producers or importers of articles have to notify ECHA when article contain substances is present above 0.1%(w/w) and its quantities in the articles above 1 tone in total per year.

Notes:

- (1) 0.1% = 1000 mg/kg(ppm)
- (2) ND=Not Detected NA=Not Available
- (3) * = calculated by the test result of Tributyl Tin or selected element (i.e. Arsenate, Lead, Cobalt or Cr (VI), respectively)
** = calculated by the test results of exclusive substances including polyaromatic hydrocarbons and heterocyclic hydrocarbon.
***= calculated based on the test result of corresponding selected element.
(i.e. Aluminium, sillion, zirconium, lead, chromium or hexavalent chromium, molybdenum)
or using a FTIR.
Report limit is calculated based on the corresponding exclusive substance or element.
- (4) The detail information for the first candidate list: 15 SVHC published at website of ECHA:
http://echa.europa.eu/consultations/authorisation/svhc/svhc_prev_cons_en.asp
The detail information for the 14 new SVHC published at website of ECHA:
http://echa.europa.eu/consultations/authorisation/svhc/svhc_cons_en.asp

Summary of test method and report limit:

Parameter	Classification	Method	Report limit
Anthracene	PBT	ZEK 01.2-08	0.005%
4,4'-Diaminodiphenylmethane	Carcinogen cat.2	EN 14362-1/2	0.005%
Dibutyl phthalate (DBP)	Toxic for reproduction cat.2	EN 14372	0.005%
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	vPvB	EPA 3550C	0.005%
Bis (2-ethyl(hexyl)phthalate) (DEHP)	Toxic for reproduction cat.2	EN 14372	0.005%
Hexabromocyclododecane (HBCDD, α,β,γ) and all major diastereoisomers identified	PBT	EPA 3540C	0.005%
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	PBT	EPA 3540C	0.005%
Benzyl butyl phthalate (BBP)	Toxic for reproduction cat.2	EN 14372	0.005%
Bis(tributyltin)oxide *	PB	BS ISO 17353	0.005%
Cobalt dichloride *	Carcinogen cat.2	EPA 3052 EN 14582	0.01%
Diarsenic pentaoxide *	Carcinogen cat.1	EPA 3052	0.01%
Diarsenic trioxide *	Carcinogen cat.1	EPA 3052	0.01%
Triethyl arsenate *	Carcinogen cat.1	EPA 3052	0.01%
Lead hydrogen arsenate *	Carcinogen cat.1 Toxic for reproduction cat.1	EPA 3052	0.01%
Sodium dichromate, dihydrate *	Carcinogen cat.2	EPA 3060A	0.01%
Anthracene oil**	PBT,vPvB,CMR	In-house method, Analysis by using GC-MS	0.05%
Anthracene oil,anthracene paste, distn.Lights**	PBT,vPvB,CMR		0.05%
Anthracene oil, anthracene paste, anthracene fraction **	PBT,vPvB,CMR		0.05%
Anthracene oil, anthracene-low **	PBT,vPvB,CMR		0.05%
Anthracene oil, anthracene paste **	PBT,vPvB,CMR		0.05%
Pitch, coal tar, high temp. **	PBT,vPvB,CMR		0.05%
Aluminosilicate Refractory Ceramic Fibres ***	CMR		In house method, Analysis by ICP-OES or FTIR
Zirconia Aluminosilicate, Refractory Ceramic Fibres ***	CMR	0.05%	
2,4-Dinitrotoluene (DNT)	CMR	EPA 3540C, Analysis by GC-MS	0.01%
Diisobutyl phthalate (DIBP)	CMR		0.01%
Lead chromate ***	CMR	In house method, Analysis by ICP-OES	0.01%
Lead chromate molybdate sulphate red (C.I. Pigment Red 104) ***	CMR		0.01%
Lead sulfochromate yellow (C.I. Pigment Yellow 34) ***	CMR		0.01%
tris(2-chloroethyl)phosphate(TCEP)	CMR	EPA 3540C, Analysis by GC-MS	0.01%

Sample photo(s), see annex1

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Product Technology Service

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ANNEX 1

Sample photos, consists of 1 page



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PVC film

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