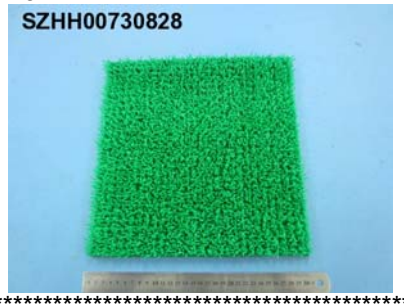
Test Report Number: SZHH00730828

Applicant: FOSHAN CHANCHENG YUFENG PLASTIC FACTORY
LUOGE WEIZAI INDUSTRY AREA,
NANZHUANG TOWN, CHANCHENG DISTRICT,
FOSHAN CITY,GUANGDONG PROVINCE,CHINA

Attn: XIAN JIN JIE

Date: Oct 09, 2012

Sample Description:
One (1) submitted sample said to be **Artificial Turf Mat/人造草垫.**
Country of Origin : China.



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Tests conducted:
As requested by the applicant, refer to attached page(s) for details.
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Summary:
According to specified test processes in this report, contents of 84 substances of very high concern (SVHC) in candidate list promulgated by European Chemicals Agency (ECHA) before and on Jun, 2012, which are defined in article 57 of regulation (EC) No. 1907/2006 (REACH regulation), are less than 0.1% (w/w) in submitted sample.
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Authorized by:
For Intertek Testing Services
Shenzhen Ltd.

Ben N.L. Lin
General Manager

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Tests Conducted

(I) SVHC Testing Results

(a) The First List (15 SVHC Released in Oct, 2008)

Chemical Substance	CAS No.	Results % (w/w)
Cobalt Dichloride Δ	7646-79-9	ND
Diarsenic Pentaoxide Δ	1303-28-2	ND
Diarsenic Trioxide Δ	1327-53-3	ND
Lead Hydrogen Arsenate Δ	7784-40-9	ND
Triethyl Arsenate Δ	15606-95-8	ND
Sodium Dichromate Δ	7789-12-0, 10588-01-9	ND
Bis (Tributyltin) Oxide (TBTO)	56-35-9	ND
Anthracene	120-12-7	ND
4,4'-Diaminodiphenylmethane (MDA)	101-77-9	ND
Hexabromocyclododecane (HBCDD) and All Major Diastereoisomers Identified (α-HBCDD, β-HBCDD, γ-HBCDD)	25637-99-4 and 3194-55-6 (134237-50-6,134237-51-7, 134237-52-8)	ND
5-Tert-Butyl-2,4,6-Trinitro-m-Xylene (Musk Xylene)	81-15-2	ND
Bis (2-Ethylhexyl) Phthalate (DEHP)	117-81-7	ND
Dibutyl Phthalate (DBP)	84-74-2	ND
Benzyl Butyl Phthalate (BBP)	85-68-7	ND
Short Chain Chlorinated Paraffins (C_{10-13})	85535-84-8	ND

(b) The Second List (13 SVHC Release in Jan, 2010 and Mar, 2010)

Chemical Substance	CAS No.	Results % (w/w)
Lead Chromate Δ	7758-97-6	ND
Lead Chromate Molybdate Sulphate Red (C.I. Pigment Red 104) Δ	12656-85-8	ND
Lead Sulfochromate Yellow (C.I. Pigment Yellow 34) Δ	1344-37-2	ND
Tris (2-Chloroethyl) Phosphate	115-96-8	ND
2,4-Dinitrotoluene	121-14-2	ND
Diisobutyl Phthalate (DIBP)	84-69-5	ND
Coal Tar Pitch, High Temperature	65996-93-2	ND
Anthracene Oil	90640-80-5	ND
Anthracene Oil, Anthracene Paste, Distn. Lights	91995-17-4	ND
Anthracene Oil, Anthracene Paste, Anthracene Fraction	91995-15-2	ND
Anthracene Oil, Anthracene-low	90640-82-7	ND
Anthracene Oil, Anthracene Paste	90640-81-6	ND
Acrylamide	79-06-1	ND

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Tests Conducted

(c) The Third List (8 SVHC Release in Jun,2010 and Mar, 2010)

Chemical Substance	CAS No.	Results % (w/w)
Boric Acid Δ	10043-35-3, 11113-50-1	ND
Disodium Tetraborate, Anhydrous Δ	1330-43-4, 12179-04-3, 1303-96-4	ND
Tetraboron Disodium Heptaoxide, Hydrate Δ	12267-73-1	ND
Sodium Chromate Δ	7775-11-3	ND
Potassium Chromate Δ	7789-00-6	ND
Ammonium Dichromate Δ	7789-09-5	ND
Potassium Dichromate Δ	7778-50-9	ND
Trichloroethylene	79-01-6	ND

(d) The Fourth List (8 SVHC Release in Dec,2010)

Chemical Substance	CAS No.	Results % (w/w)
2-Methoxyethanol	109-86-4	ND
2-Ethoxyethanol	110-80-5	ND
Cobalt Sulphate Δ	10124-43-3	ND
Cobalt Dinitrate Δ	10141-05-6	ND
Cobalt Carbonate Δ	513-79-1	ND
Cobalt Diacetate Δ	71-48-7	ND
Chromium Trioxide Δ	1333-82-0	ND
Chromic Acid Δ Dichromic Acid Δ Oligomers of Chromic Acid and Dichromic Acid Δ	7738-94-5 13530-68-2 --	ND

(e) The Fifth List (7 SVHC Release in Jun, 2011)

Chemical Substance	CAS No.	Results % (w/w)
Strontium ChromateΔ	7789-06-2	ND
2-ethoxyethyl acetate (2-EEA)	111-15-9	ND
1,2-Benzenedicarboxylic acid, di-C_{7-11}-branched and linear alkyl esters (DHNUP)	68515-42-4	ND
Hydrazine	7803-57-8 302-01-2	ND
1-methyl-2-pyrrolidone	872-50-4	ND
1,2,3-trichloropropane	96-18-4	ND
1,2-Benzenedicarboxylic acid, di-C_{6-8}-branched alkyl esters, C_7-rich (DIHP)	71888-89-6	ND

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Tests Conducted

(f) The Sixth List (20 SVHC Release in Dec, 2011)

Chemical Substance	CAS No.	Results % (w/w)
Lead dipicrate∆	6477-64-1	ND
Lead styphnate∆	15245-44-0	ND
Lead azide; Lead diazide∆	13424-46-9	ND
Phenolphthalein	77-09-8	ND
2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	ND
N,N-dimethylacetamide (DMAC)	127-19-5	ND
Trilead diarsenate∆	3687-31-8	ND
Calcium arsenate∆	7778-44-1	ND
Arsenic acid∆	7778-39-4	ND
Bis(2-methoxyethyl) ether	111-96-6	ND
1,2-Dichloroethane	107-06-2	ND
4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	ND
2-Methoxyaniline; o-Anisidine	90-04-0	ND
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	ND
Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	ND
Pentazinc chromate octahydroxide∆	49663-84-5	ND
Potassium hydroxyoctaoxodizincate di-chromate∆	11103-86-9	ND
Dichromium tris(chromate)∆	24613-89-6	ND
Aluminosilicate Refractory Ceramic Fibres ∆	(Index No. 650-017-00-8)	ND
Zirconia Aluminosilicate Refractory Ceramic Fibres ∆	(Index No. 650-017-00-8)	ND

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Tests Conducted

(g) The Seventh List (13 SVHC Release in Jun, 2012)

Chemical Substance	CAS No.	Results % (w/w)
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	ND
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	ND
Diboron trioxide∆	1303-86-2	ND
Formamide	1975/12/7	ND
Lead(II) bis(methanesulfonate) ∆	17570-76-2	ND
TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	ND
β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6	ND
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	ND
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	ND
[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) *[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]*	548-62-9	ND
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) *[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]*	2580-56-5	ND
α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) *[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michl*er's base (EC No. 202-959-2)]	6786-83-0	ND
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol *[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]*	561-41-1	ND

SVHC = Substance of very high concern
ND = Not detected (the result is less than the reporting limit)
∆ = Determination was based on elemental analysis. The concentration was calculated based on assumption of worst-case.
% = Percentage

Date sample received : Sep 25, 2012
Testing period : Sep 25, 2012 to Sep 28, 2012

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Tests Conducted

(Ⅱ) Testing Methods of SVHC

(a) The First List (15 SVHC Released in Oct, 2008)

Chemical Substance	Method	Reporting limit
Cobalt Dichloride	By microwave digestion and determined by ICP-OES, further combustion and IC confirmation when necessary	0.050%
Diarsenic Pentaoxide	By microwave digestion and determined by ICP-OES	0.050%
Diarsenic Trioxide		0.050%
Lead Hydrogen Arsenate		0.050%
Triethyl Arsenate		0.050%
Sodium Dichromate	By microwave digestion and determined by ICP-OES, further solvent extraction and UV-VIS confirmation when necessary	0.050%
Bis(Tributyltin) Oxide (TBTO)	By solvent extraction and determined by GC-MSD	0.050%
Anthracene		0.050%
4,4'-Diaminodiphenylmethane (MDA)		0.050%
Hexabromocyclododecane (HBCDD)		0.050%
5-Tert-Butyl-2,4,6-Trinitro-m-Xylene (Musk Xylene)		0.050%
Bis(2-Ethylhexyl) Phthalate (DEHP)		0.050%
Dibutyl Phthalate (DBP)		0.050%
Benzyl Butyl Phthalate (BBP)		0.050%
Short Chain Chlorinated Paraffins (C_{10-13})		0.050%

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Tests Conducted

(b) The Second List (13 SVHC Released in Jan, 2010 and Mar, 2010)

Chemical Substance	Method	Reporting limit
Lead Chromate	By microwave digestion and determined by ICP-OES, further solvent extraction and UV-VIS confirmation when necessary	0.050%
Lead Chromate Molybdate Sulphate Red (C.I. Pigment Red 104)		0.050%
Lead Sulfochromate Yellow (C.I. Pigment Yellow 34)		0.050%
Tris (2-Chloroethyl) Phosphate	By solvent extraction and determined by GC-MSD	0.050%
2,4-Dinitrotoluene		0.050%
Diisobutyl Phthalate (DIBP)		0.050%
Coal Tar Pitch, High Temperature		0.050%
Anthracene Oil		0.050%
Anthracene Oil, Anthracene Paste, Distn. Lights		0.050%
Anthracene Oil, Anthracene Paste, Anthracene Fraction		0.050%
Anthracene Oil, Anthracene-low		0.050%
Anthracene Oil, Anthracene paste		0.050%
Acrylamide		0.050%

(c) The Third List (8 SVHC Released in Jun, 2010)

Chemical Substance	Method	Reporting limit
Boric Acid	By microwave digestion and determined by ICP-OES	0.050%
Disodium Tetraborate, Anhydrous		0.050%
Tetraboron Disodium Heptaoxide, Hydrate		0.050%
Sodium Chromate	By microwave digestion and determined by ICP-OES, further solvent extraction and UV-VIS confirmation when necessary	0.050%
Potassium Chromate		0.050%
Ammonium Dichromate		0.050%
Potassium Dichromate		0.050%
Trichloroethylene	By solvent extraction and determined by GC-MSD	0.050%

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Tests Conducted

(d) The Fourth List (8 SVHC Released in Dec, 2010)

Chemical Substance	Method	Reporting limit
2-Methoxyethanol	By solvent extraction and determined by GC-MSD	0.050%
2-Ethoxyethanol		0.050%
Cobalt Sulphate	By microwave digestion and determined by ICP-OES	0.050%
Cobalt Dinitrate		0.050%
Cobalt Carbonate		0.050%
Cobalt Diacetate		0.050%
Chromium Trioxide	By microwave digestion and determined by ICP-OES, further solvent extraction and UV-VIS confirmation when necessary	0.050%
Chromic Acid Dichromic Acid Oligomers Of Chromic Acid And Dichromic Acid		0.050%

(e) The Fifth list (7 SVHC Released in Jun, 2011)

Chemical Substance	Method	Reporting limit
Strontium Chromate	By microwave digestion and determined by ICP-OES, further solvent extraction and UV-VIS confirmation when necessary	0.050%
2-ethoxyethyl acetate (2-EEA)	By solvent extraction and determined by GC-MSD	0.050%
1,2-Benzenedicarboxylic acid, di-C_{7-11}-branched and linear alkyl esters (DHNUP)		0.050%
Hydrazine		0.050%
1-methyl-2-pyrrolidone		0.050%
1,2,3-trichloropropane		0.050%
1,2-Benzenedicarboxylic acid, di-C_{6-8}-branched alkyl esters, C_7-rich (DIHP)		0.050%

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Tests Conducted

(f) The Sixth list (20 SVHC Released in Dec, 2011)

Chemical Substance	Method	Reporting limit
Pentazinc chromate octahydroxide	By microwave digestion and determined by ICP-OES, further solvent extraction and UV-VIS confirmation when necessary	0.050%
Potassium hydroxyoctaoxodizincate di-chromate		0.050%
Dichromium tris(chromate)		0.050%
Lead dipicrate	By microwave digestion and determined by ICP-OES	0.050%
Lead azide; Lead diazide		0.050%
Trilead diarsenate		0.050%
Calcium arsenate		0.050%
Lead styphnate		0.050%
Arsenic acid		0.050%
Aluminosilicate Refractory Ceramic Fibres		0.050%
Zirconia Aluminosilicate Refractory Ceramic Fibres		0.050%
2,2'-dichloro-4,4'-methylenedianiline (MOCA)	By solvent extraction and determined by GC-MSD	0.050%
N,N-dimethylacetamide (DMAC)		0.050%
Bis(2-methoxyethyl) ether		0.050%
1,2-Dichloroethane		0.050%
4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)		0.050%
Bis(2-methoxyethyl) phthalate (DMEP)		0.050%
Formaldehyde, oligomeric reaction products with aniline (technical MDA)		0.050%
Phenolphthalein		0.050%
2-Methoxyaniline; o-Anisidine		0.050%

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Tests Conducted

(g) The Seventh list (13 SVHC Released in Jun, 2012)

Chemical Substance	Method	Reporting limit
Diboron trioxide	By microwave digestion and determined by ICP-OES	0.050%
Lead(II) bis(methanesulfonate)		0.050%
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	By solvent extraction and determined by GC-MSD	0.050%
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)		0.050%
Formamide		0.050%
TGIC(1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)		0.050%
β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)		0.050%
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)		0.050%
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)		0.050%
α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) *[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]*		0.050%
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol*[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]*		0.050%
[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) *[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]*	By solvent extraction and determined by GC-MSD and further confirmation by HPLC-DAD when necessary	0.050%
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) *[with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]*		0.050%

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Tests Conducted

Reporting limit = Quantitation limit of analyte in sample
Notes:
1. Substances of very high concern (SVHC) are classified as:
a. Carcinogenic, mutagenic or toxic to reproduction category 1 (proven on humans) and category 2 (proven on animals)
b. Persistent, bioaccumulative and toxic chemicals (PBT)
c. Very persistent and very bioaccumulative chemicals (vPvB)
d. Other similar substances such as endocrine disrupters
2. If the imported or manufactured volume of each individual SVHC in article is more than 0.1% (w/w) and if it exceeds 1 tonne per year across all product ranges, then importer or manufacturer require notification to the European Chemical Agency (ECHA). Notification should be done by June 2011, which is 4 years after REACH has been implemented. The following information has to be submitted for notification:
a. Identification of the registrant and the substance
b. Classification and labelling of the substance
c. Description of use of the substance and the article
d. Registration number, if available
e. Tonnage range
3. As per article 33(1) of regulation (EC) No. 1907/2006 (REACH), recipients of product must be provided with information of safe use if any of the tested substances (SVHC) exceeded 0.1% (w/w). A product meets the requirement of article 33(1) by default when no SVHC exceeds 0.1% (w/w).
4. As per article 31 of regulation (EC) No. 1907/2006 (REACH), suppliers of preparations not classified as dangerous according to directive 1999/45/EC have to provide the recipients, at their request, with a MSDS if the preparations contain at least one substance on the SVHC candidate list and its individual concentration is 0.1%(w/w) or above for non-gaseous preparations.

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End of Report

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