

Report No.: 1613048782-02

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Client: DAI A INDUSTRY JOINT STOCK COMPANY

Hamlet 2, Huong Ngai Commune, Thach That District, Ha Noi City,
Vietnam

Test item(s): Plastic granules

Identification/ FILLER MASTERBATCH; MODEL: IF-PE80X; MATERIAL: PLASTIC;
Model No(s): COLOR: WHITE

Sample Receiving date: 2018-05-10

Testing Period: 2018-05-11 - 2018-05-17

Test Specification:

Test result:

Customer's requirement:

1. Risk Assessment of Articles: Screening of substances of very high concern (SVHC) subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014 and (EU) No. 2017/999 (Annex XIV of EC No 1907/2006) and candidate list by European Chemical Agency (ECHA), according to the EU Court of Justice rules on SVHCs in articles (Guidance on requirements for substances in articles, June 2017)

The tested material does not contain any SVHCs over 0.1% by weight

For and on behalf of
TÜV Rheinland Vietnam Co., Ltd.

 

2018-05-17

Hoa Thi Xuan Dieu / Project Manager

Date

Name/Position

Test result is drawn according to the kind and extent of tests performed.

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

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Material List:

Item: FILLER MASTERBATCH; MODEL: IF-PE80X; MATERIAL: PLASTIC; COLOR: WHITE

Material No.	Material	Color	Location
M001	Plastic	Milky white	Plastic granules (IF-PE80X)

1. Screening of substances of very high concern (SVHC) subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014 and (EU) No. 2017/999 (Annex XIV of EC No 1907/2006) and candidate list by European Chemical Agency (ECHA), according to the EU Court of Justice rules on SVHCs in articles.

Test Results

Screening of SVHCs subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014 and (EU) No. 2017/999 (Annex XIV of EC No 1907/2006) and SVHCs in candidate list by European Chemical Agency (ECHA), and the EU Court of Justice rules on SVHCs in articles

Test Method: 1) Test portion is digested with acid and assisted with microwave, the elements are analysed by ICP-OES.
 2) Test portion is extracted by organic solvent, semi-quantitative analysis by GC-MS / UV-Vis.
 3) Test portion is extracted by organic solvent, the extraction solution is analyzed by Headspace-GC/MS / LC-DAD-MS / LC-MS/MS.

Test No.:	T001
Material No.:	M001
Result (%)	n.d.

Abbreviation: n.d. = Not Detected (< Reporting Limit)
 RL = Reporting Limit
 % = Percentage

Remark:

(*1) The reporting limit for each individual SVHC subject to authorisation according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014 and (EU) No. 2017/999 (Annex XIV of EC No 1907/2006):

	Substance	CAS No.	Reporting Limit
1	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	0.01%
2	Benzyl butyl phthalate (BBP)	85-68-7	0.01%
3	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	0.01%
4	Dibutyl phthalate (DBP)	84-74-2	0.01%
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4 / 3194-55-6 / 134237-50-6 / 134237-51-7 / 134237-52-8	0.01%
6	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	0.01%
7	2,4-Dinitrotoluene (2,4-DNT)	121-14-2	0.01%

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8	Diisobutyl phthalate (DIBP)	84-69-5	0.01%
9	Tris(2-chloroethyl)phosphate	115-96-8	0.01%
10	Diarsenic pentaoxide (*3)	1303-28-2	0.01%
11	Diarsenic trioxide (*3)	1327-53-3	0.01%
12	Lead chromate (*3)(*4)	7758-97-6	0.01%
13	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) (*3)(*4)	12656-85-8	0.01%
14	Lead sulfochromate yellow (C.I. Pigment Yellow 34) (*3)	1344-37-2	0.01%
15	Trichloroethylene	79-01-6	0.01%
16	Chromium trioxide (*4)	1333-82-0	0.01%
17	Acids generated from chromium trioxide and their oligomers: Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid. (*4)	7738-94-5 / 13530-68-2	0.01%
18	Sodium dichromate (*3)	7789-12-0 / 10588-01-9	0.01%
19	Potassium dichromate (*4)	7778-50-9	0.01%
20	Ammonium dichromate (*4)	7789-09-5	0.01%
21	Potassium chromate (*4)	7789-00-6	0.01%
22	Sodium chromate (*4)	7775-11-3	0.01%
23	Formaldehyde, oligomeric reaction products with aniline (technical MDA) (*11)	25214-70-4	0.01%
24	1,2-Dichloroethane	107-06-2	0.01%
25	Bis(2-methoxyethyl) ether	111-96-6	0.01%
26	Arsenic acid (*3)	7778-39-4	0.01%
27	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	0.01%
28	Dichromium tris(chromate) (*4)	24613-89-6	0.01%
29	Strontium chromate (*4)	7789-06-2	0.01%
30	Potassium hydroxyoctaoxodizincatedichromate (*4)	11103-86-9	0.01%
31	Pentazinc chromate octahydroxide (*4)	49663-84-5	0.01%
32	1-bromopropane (n-propyl bromide)	106-94-5	0.01%
33	Diisopentylphthalate	605-50-5	0.01%
34	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	0.01%
35	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	0.01%
36	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.01%
37	Bis(2-methoxyethyl) phthalate	117-82-8	0.01%
38	Dipentyl phthalate (DPP)	131-18-0	0.01%
39	N-pentyl-isopentylphthalate	776297-69-9	0.01%
40	Anthracene oil (*7)	90640-80-5	0.01%
41	Pitch, coal tar, high temperature (*7)	65996-93-2	0.01%
42	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (OPEO) [covering well-defined substances and UVCB substances, polymers and homologues]	-	0.01%
43	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	0.01%

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(*2) The reporting limit for each individual SVHC in Candidate List by ECHA:

	Substance	CAS No.	Reporting Limit
44	Anthracene	120-12-7	0.01%
45	Bis(tributyltin) oxide (TBTO) (*3) (*5)	56-35-9	0.01%
46	Triethyl arsenate (*3)	15606-95-8	0.01%
47	Lead hydrogen arsenate (*3)	7784-40-9	0.01%
48	Cobalt dichloride (*3)	7646-79-9	0.01%
49	Acrylamide	79-06-1	0.01%
50	Anthracene oil, anthracene paste, distn. lights (*7)	91995-17-4	0.01%(*8)
51	Anthracene oil, anthracene paste, anthracene fraction (*7)	91995-15-2	
52	Anthracene oil, anthracene-low (*7)	90640-82-7	
53	Anthracene oil, anthracene paste (*7)	90640-81-6	
54	Boric acid (*3) (*6)	10043-35-3 / 11113-50-1	0.01%
55	Disodium tetraborate, anhydrous (*3) (*6)	1303-96-4 / 1330-43-4 / 12179-04-3	0.01%
56	Tetraboron disodium heptaoxide, hydrate (*3) (*6)	12267-73-1	0.01%
57	2-Methoxyethanol	109-86-4	0.01%
58	2-Ethoxyethanol	110-80-5	0.01%
59	Cobalt(II) sulphate (*3)	10124-43-3	0.01%
60	Cobalt(II) dinitrate (*3)	10141-05-6	0.01%
61	Cobalt(II) carbonate (*3)	513-79-1	0.01%
62	Cobalt(II) diacetate (*3)	71-48-7	0.01%
63	Alkanes C10-C13, chloro (Short Chain Chlorinated Paraffins) (SCCP)	85535-84-8	0.01%
64	2-Ethoxyethyl acetate	111-15-9	0.01%
65	Hydrazine	302-01-2 / 7803-57-8	0.01%
66	1-Methyl-2-pyrrolidone (NMP)	872-50-4	0.01%
67	1,2,3-Trichloropropane	96-18-4	0.01%
68	Aluminosilicate Refractory Ceramic Fibres (RCF) (*9)	-	0.01%
69	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) (*9)	-	0.01%
70	2-Methoxyaniline,o-Anisidine	90-04-0	0.01%
71	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.01%
72	Calcium arsenate (*3)	7778-44-1	0.01%
73	Trilead diarsenate (*3)	3687-31-8	0.01%
74	N,N-dimethylacetamide (DMAC)	127-19-5	0.01%
75	Phenolphthalein	77-09-8	0.01%
76	Lead dipicrate (*3)	6477-64-1	0.01%
77	Lead diazide, Lead azide (*3)	13424-46-9	0.01%
78	Lead styphnate (*3)	15245-44-0	0.01%
79	1,2-bis(2-methoxyethoxy)ethane (TEGDME,triglyme)	112-49-2	0.01%
80	1,2-dimethoxyethane,ethylene glycol dimethyl ether (EGDME)	110-71-4	0.01%

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81	Diboron trioxide (*3) (*6)	1303-86-2	0.01%
82	Formamide	75-12-7	0.01%
83	Lead(II) bis(methanesulfonate) (*3)	17570-76-2	0.01%
84	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazine-2,4,6-trione (TGIC)	2451-62-9	0.01%
85	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	
86	4,4'-bis(dimethylamino)benzophenone (Michler's ketone), MK	90-94-8	0.01%
87	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base), RMK	101-61-1	0.01%
88	[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)] (*10)	2580-56-5	0.01%
89	[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)] (*10)	548-62-9	
90	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)] (*10)	561-41-1	
91	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)] (*10)	6786-83-0	
92	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)	1163-19-5	0.01%
93	Pentacosafuorotridecanoic acid	72629-94-8	0.01%
94	Tricosafuorododecanoic acid	307-55-1	0.01%
95	Henicosafuoroundecanoic acid	2058-94-8	0.01%
96	Heptacosafuorotetradecanoic acid	376-06-7	0.01%
97	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA) (*12)	123-77-3	0.05%
98	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	85-42-7 / 13149-00-3 / 14166-21-3	0.01%
99	Hexahydromethylphthalic anhydride (MHHPA) [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0 / 19438-60-9 / 48122-14-1 / 57110-29-9	0.01%
100	N,N-dimethylformamide	68-12-2	0.01%
101	1,2-Diethoxyethane	629-14-1	0.01%
102	Diethyl sulphate	64-67-5	0.01%
103	Methoxyacetic acid (MAA)	625-45-6	0.01%
104	Dimethyl sulphate	77-78-1	0.01%
105	N-methylacetamide	79-16-3	0.01%
106	Furan	110-00-9	0.01%
107	Methyloxirane (Propylene oxide)	75-56-9	0.01%
108	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	0.01%
109	Dibutyltin dichloride (DBTC) (*3)	683-18-1	0.01%
110	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	0.01%
111	4,4'-methylenedi-o-toluidine	838-88-0	0.01%
112	4,4'-oxydianiline and its salts	101-80-4	0.01%

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113	4-Aminoazobenzene	60-09-3	0.01%
114	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	0.01%
115	6-methoxy-m-toluidine (p-cresidine)	120-71-8	0.01%
116	Biphenyl-4-ylamine	92-67-1	0.01%
117	o-aminoazotoluene	97-56-3	0.01%
118	o-Toluidine	95-53-4	0.01%
119	Acetic acid, lead salt, basic (*3)	51404-69-4	0.01%
120	Trilead bis(carbonate) dihydroxide (*3)	1319-46-6	0.01%
121	Lead oxide sulfate (*3)	12036-76-9	0.01%
122	[Phthalato(2-)]dioxotrilead (*3)	69011-06-9	0.01%
123	Dioxobis(stearato)trilead (*3)	12578-12-0	0.01%
124	Fatty acids, C16-18, lead salts (*3)	91031-62-8	0.01%
125	Lead bis(tetrafluoroborate) (*3)	13814-96-5	0.01%
126	Lead cyanamidate (*3)	20837-86-9	0.01%
127	Lead dinitrate (*3)	10099-74-8	0.01%
128	Lead monoxide (lead oxide) (*3)	1317-36-8	0.01%
129	Orange lead (lead tetroxide) (*3)	1314-41-6	0.01%
130	Lead titanium trioxide (*3)	12060-00-3	0.01%
131	Lead titanium zirconium oxide (*3)	12626-81-2	0.01%
132	Pyrochlore, antimony lead yellow (*3)	8012-00-8	0.01%
133	Pentalead tetraoxide sulphate (*3)	12065-90-6	0.01%
134	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped <i>[with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD), the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] (*3)</i>	68784-75-8	0.01%
135	Silicic acid, lead salt (*3)	11120-22-2	0.01%
136	Sulfurous acid, lead salt, dibasic (*3)	62229-08-7	0.01%
137	Tetraethyllead (*3)	78-00-2	0.01%
138	Tetralead trioxide sulphate (*3)	12202-17-4	0.01%
139	Trilead dioxide phosphonate (*3)	12141-20-7	0.01%
140	Ammonium pentadecafluorooctanoate (APFO) (*13)	3825-26-1	0.01%
141	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.01%
142	Cadmium (*3)	7440-43-9	0.01%
143	Cadmium oxide (*3)	1306-19-0	0.01%
144	4-Nonylphenol, branched and linear, ethoxylated (NPEO) <i>[substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]</i>	-	0.01%
145	Dihexyl phthalate	84-75-3	0.01%
146	Trixylyl phosphate	25155-23-1	0.01%
147	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.01%
148	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-minonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	0.01%
149	Disodium 4-amino-3'-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	0.01%
150	Lead di(acetate) (*3)	301-04-2	0.01%
151	Cadmium sulphide (*3)	1306-23-6	0.01%
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.01%
153	Cadmium chloride (*3)	10108-64-2	0.01%

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154	Sodium perborate,perboric acid, sodium salt (*3) (*6)	-	0.01%
155	Sodium peroxometaborate (*3) (*6)	7632-04-4	0.01%
156	Cadmium fluoride (*3)	7790-79-6	0.01%
157	Cadmium sulphate (*3)	10124-36-4 / 31119-53-6	0.01%
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	0.01%
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	0.01%
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) (*14)	15571-58-1	0.01%
161	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) (*15)	-	0.01%
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 / 68648-93-1	0.01%
163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-	0.01%
164	1,3-propanesultone	1120-71-4	0.01%
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	0.01%
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	0.01%
167	Nitrobenzene	98-95-3	0.01%
168	Perfluoronon-1-ol-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	0.01%
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	0.01%
170	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	0.01%
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3830-45-3 3108-42-7	0.01%
172	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	0.01%
173	p-(1,1-dimethylpropyl)phenol	80-46-6	0.01%
174	Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	-	0.01%
175	Chrysene	218-01-9	0.01%
176	Benz[a]anthracene	56-55-3	0.01%
177	Cadmium nitrate(*3)	10325-94-7	0.01%
178	Cadmium hydroxide(*3)	21041-95-2	0.01%
179	Cadmium carbonate(*3)	513-78-0	0.01%
180	1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo [12.2.1.1.1 ^{6,9} .0 ^{2,13} .0 ^{5,10}]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	0.01%
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	-	0.01%

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Remark:

- (*3) The substances are tested and calculated in terms of its respective elements (e.g. As, Pb, Co, B, Cd, Sn).
- (*4) The substances are tested and calculated in terms of Cr (VI).
- (*5) The substance is tested and calculated in terms of Tributyl tin.
- (*6) The substances are confirmed and tested in terms of Boric acid when Boron is detected in the sample.
- (*7) The substances are UVCB (substance of unknown or variable composition, complex reaction products or biological materials), which are identified by its main constituents.
- (*8) Individual concentrations to the constituent of UVCB with an amount of < 0.01% were not considered by the calculation of the sum.
- (*9) The test results are based on microscopic and chemical evaluation.
- (*10) The substances are quantified in terms of Michler's ketone and Michler's base by LC-MS, as Michler's ketone or Michler's base was found exceeds 0.01%.
- (*11) The content oligomer is determined by Py-GC/MS.
- (*12) The content of diazene-1,2-dicarboxamide is analyzed in terms of its breakdown product.
- (*13) The substance is tested in terms of pentadecafluorooctanoate.
- (*14) The substance is tested and calculated in terms of Dioctyl tin.
- (*15) The substance is tested and calculated in terms of Monooctyl tin and Dioctyl tin.

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Sample Photo



Lab ID.: A000738825-002

- END -