

RESTRICTED SUBSTANCE LIST
&
CHEMICAL CONTRACT

February 2017

CHEMICAL CONCERN AT MINI RODINI

Mini Rodini's chemical concern reflects an awareness of how chemicals affect the environment and human health in the local production countries as well as our sales markets and consumers. For every Mini Rodini design and product development, chemical use is carefully considered. The product is always adapted to minimize the risk of harmful chemicals being used, through electing sustainable materials and certifications consciously.

Nevertheless, the base requirement and most important part in the chemical risk management of our company, is that this Mini Rodini RSL is complied with just as well as REACH and the local chemical laws in the production- and sales market countries.

REACH LEGAL OBLIGATIONS

Mini Rodini and its suppliers and partners are required to comply with the European Chemicals legislation REACH in force since 1st of June 2007.

The essence of REACH is to ensure a high level of safety for environment and human health, focused on substances in general and hazardous substances in particular, that are manufactured in, imported to and used in EU. It is the responsibility of all manufacturers, importers, distributors and users to ensure the substances they trade or use doesn't pose any risk to environment or human health.

Duty to inform

Since 28th of October 2008, all EU-actors that professionally manufacture, import, sell or distribute products are legally obliged to inform their customer about the presence of the candidate substances in the products they sell. This includes that each supplier from their side subsequently need to inform Mini Rodini if they know if any of the candidate substances are present, and in what value, for each style per shipment.

THE MINI RODINI RSL

The Mini Rodini RSL is in accordance with REACH as well as additional voluntary criteria. It is costume made for Mini Rodini and covers the full assortment of products. The value Mini Rodini requires its suppliers to follow is the "Mini Rodini Limit value" stated below.

The Mini Rodini RSL will be updated in accordance to each update of REACH and coming additional and stricter demands from the industry and Mini Rodini. Every update will be sent out continuously to each supplier for new signature and compliance.

RESPONSIBILITY OF THE PARTIES

In case of known difficulty to comply with the limit values, prohibition of substances or any other requirements in this agreement, this must be informed to and discussed with Mini Rodini to find a substitution or other applicable solution.

For chemical tests, requested test method and test equipment stated in each chapter of RSL must be used. If other test method or equipment is used than what RSL demands without approval from Mini Rodini, supplier needs to remake the analysis according to RSL at their cost.

Requested detection limit must be followed. If not possible, supplier must inform Mini Rodini and ask for confirmation.

PRODUCT RELATED CHEMICALS

CHEMICAL SUBSTANCES	MINI RODINI LIMIT VALUE	TEST METHOD AND TEST EQUIPMENT	REQUIRED DETECTION LIMIT
Allergenic disperse dyes <i>See appendix 1 for specified dyes</i>	PROHIBITED	EN ISO 16373	50 mg/kg
Navy Blue (banned mordant dye) CAS RN 405-665-4 (EC #)	PROHIBITED	EN ISO 16373	50 mg/kg
Azo dyes, degradable to carcinogenic arylamines <i>See appendix 2 for specified dyes</i>	PROHIBITED	EN 14362-1,-3	20 mg/kg
Cadmium and cadmium salts CAS RN 7440-43-9	PROHIBITED	EN 16711-1	1 µg/kg
CMR, Carcinogenic, Mutagenic, Reproductive toxic dyestuffs <i>See appendix 3 for specified dyes</i>	PROHIBITED	EN ISO 16373	20 mg/kg
Chloroparaffins Short-chain chloroparaffins (C10-C13) CAS RN 85535-84-8 Medium-chain chloroparaffins (C14-C17) CAS RN 85535-85-9	PROHIBITED	GC-MS, LC-MS No standardized test method available.	100 mg/kg
Chromium VI (Cr+6) CAS RN 18540-29-9.	PROHIBITED	UV-VIS Spectrometer No standardized test method available.	0,5 mg/kg
Formaldehyde CAS RN 50-00-0	PROHIBITED <i>Formaldehyde generated substances are not allowed.</i>	Textile: EN ISO 14184-1 Due to its volatility fabric samples for testing must be packed separately in plastic bags (polyethylene, PE, or polypropylene, PP).	16 mg/kg
Flame retardants Hexabromocyclododecan (HBCDD) Polybrominated biphenyls (PBB) Polybrominated diphenyl ethers (PBDE) Tris(2-chlorethyl) phosphate (TCEP)	PROHIBITED	GC-MS, LC-MS, GC-ECD EN ISO 17881-1 (textiles) EN 16377 for PBB (plastics)	10 mg/kg
Lead and Lead salts CAS RN 7439-92-1 <i>See appendix 4.</i>	PROHIBITED	EN 16711-1	1 µg/kg
Mercury CAS RN 7439-97-6 Phenylmercury neodecanoat: 26545-49-3 Phenylmercury octanoate: 13864-38-5 Phenylmercury 2-ethylhexanoate: 13302-00-6 Phenylmercury propionate : 103-27-5 Phenylmercury acetate: 62-38-4	PROHIBITED	EN 16711-1	10 µg/kg
Nickel CAS RN 7440-02-0	PROHIBITED	EN 12472:2005 + A1:2009 and EN 1811:2011+A1:2015 (for coated items) 1811:2011+A1:2015 (for non-coated item)	0,001 µg/cm ² /week

PVC All PVC-methods.	PROHIBITED	Beilstein	No PVC detected
Per and polyfluorinated compounds (PFAS) CAS RN Various <i>See appendix 10</i>	PROHIBITED	LC-MS/MS, GC-MS/MS No standardized test method available.	0,005 mg/kg
Phthalates esters CAS RN: <i>See Appendix 5</i>	PROHIBITED	EN ISO 14389:2014	100 mg/kg
Trixylyl phosphate CAS RN 25155-23-1	PROHIBITED	EN ISO 17881-2 GC-MS, LC-MS, GC-ECD	200 mg/kg
Boric acid, borate compounds <i>See appendix 9</i>	PROHIBITED	Test equipment: 1) AAS. 2) ICP-MS and ICP-OES	1) 1000 µg/kg as Boron. 2) 100 µg/kg as Boron
Benzotriazols (UV-320 and UV-328) UV-320 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320); CAS RN 3846-71-7 UV-328: 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328); CAS RN 25973-55-1 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) CAS RN 3864-99-1 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350) CAS RN 36437-37-3	PROHIBITED	GC-MS, LC-MS, GC-ECD	To be advised by Mini Rodini authorized laboratory LOD

PROCESS RELATED CHEMICALS

CHEMICAL SUBSTANCES	MINI RODINI LIMIT VALUE	TEST METHOD AND TEST EQUIPMENT	REQUIRED DETECTION LIMIT
Alkylphenol ethoxylates (APEO) and Alkylphenol (AP) For example: Nonyphenol ethoxylates (NPEO) Octylphenol ethoxylates (OPEO) Nonyphenol (NP) Octylphenol (OP)	PROHIBITED Occurrence in products below 100 mg/kg for total APEO is regarded as unintended residues which cannot be controlled.	ISO 18254	10 mg/kg
Aromatic organic solvents	PROHIBITED	GC-MS No standardized test method available.	0,5 mg/kg (total content)
Aliphatic organic solvents	PROHIBITED	Panel odour test, SNV 195 651	0,5 mg/kg (total content)
Chlorinated organic solvents <i>See appendix 6</i>	PROHIBITED	No standardized test method available.	0,1 mg/kg (total content)
Other organic solvents DMFa, DMAC, NMP, Formamide. <i>See appendix 7</i>	PROHIBITED	GC-MS, LC-MS No standardized test method available.	1 mg/kg
Ethylenethiourea	PROHIBITED	LC-MS No standardize test method available.	1 mg/kg
Hydrazine	PROHIBITED	UV-VIS Spectrometer No standardized test method available.	1 mg/kg
PAH- Polycyclic aromatic hydrocarbons <i>See appendix 8</i>	PROHIBITED	ISO 21461 or ZEK 01.4-08	0,2 mg/kg
Tin organic compounds Biocides; trialkyl tin compounds Stabilisers: Dialkyl- and monalkyl tin organic compounds	PROHIBITED	ICP-MS (P-MS total tin content) No standardized test method available.	0,015 mg/kg
Bisphenol A; BPA CAS RN 80-05-7	PROHIBITED	LC-MS No standardized test method available.	1 mg/kg

BIOCIDAL AGENTS

CHEMICAL SUBSTANCES	MINI RODINI LIMIT VALUE	TEST METHOD AND TEST EQUIPMENT	REQUIRED DETECTION LIMIT
Allergenic fungicides (DMFu) CAS RN 624-49-7	PROHIBITED	GC-MS, LC-MS ISO/TS 16186	0,05 mg/kg
Fungicides (PCP, TeCP) CAS RN 87-86-5, 131-52-2 All isomers of Tetrachlorophenols	PROHIBITED	XP G 08-015	0,05 mg/kg
Insecticides (Permethrin) CAS RN 52645-53-1	PROHIBITED	GC MS, LC-MS No standardized test method available.	0,5 mg/kg
Silver compounds (Ag+)	PROHIBITED	ICP-MS, ICP-OES, AAS No standardize test method available.	0,1 mg/kg
Tributyltin compounds Tributyltin oxide (TBTO): 56-35-9 Tributyltin chloride: 1461-22-9 Tributyltin fluoride: 1983-10-4 Tributyltin methacrylate: 2155-70-6 Tributyltin benzoate: 4342-36-3 Tributyltin linoleate: 24124-25-2 Tributyltin naphthenate: 85409-17-2	PROHIBITED	GC MS No standardized test method for textiles available.	0,015mg/kg
Triclosan CAS RN 3380-34-5	PROHIBITED	GC-MS, LC-MS No standardized test method available.	0,05 mg/kg
Cu-HDO (Bis-(N-cyclohexyldiazoniumdioxy) -copper) CAS RN 312600-89-8	PROHIBITED	ICP-MS, LC-MS. No standardized test method available.	To be advised by Mini Rodini authorized laboratory LOD
Guanidine, N,N'''-1,6-hexanediylbis[N'-cyano-, polymer with 1,6-hexanediamine, hydrochloride (PHMB 1600; 1.8) CAS RN 27083-27-8	PROHIBITED	No standardized test method available.	0,05 mg/kg

OTHER

pH	Textile: ISO 3071	Textile: 4.0 – 8.5
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Appendix 1

List of 20 allergenic disperse dyestuffs

C.I. Name	CAS RN
C.I. Disperse Yellow 1	119-15-3
C.I. Disperse Blue 35	12222-75-2
C.I. Disperse Blue 102	12222-97-8
C.I. Disperse Blue 106	12223-01-7
C.I. Disperse Yellow 39	12236-29-2
C.I. Disperse Orange 37/59/76	13301-61-6
C.I. Disperse Brown 1	23355-64-8
C.I. Disperse Blue 3	2475-46-9
C.I. Disperse Orange 1	2581-69-3
C.I. Disperse Yellow 3	2832-40-8
C.I. Disperse Red 11	2872-48-2
C.I. Disperse Red 1	2872-52-8
C.I. Disperse Red 17	3179-89-3
C.I. Disperse Blue 7	3179-90-6
C.I. Disperse Blue 26	3860-63-7
C.I. Disperse Yellow 49	54824-37-2
C.I. Disperse Blue 124	61951-51-7
C.I. Disperse Yellow 9	6373-73-5
C.I. Disperse Orange 3	730-40-5
C.I. Disperse Blue 1	2475-45-8

Appendix 2

List of 24 banned arylamines

Name	CAS RN
4,4-Methylene-bis[2-chloro-aniline]	101-14-4
4,4-Methylenedianiline	101-77-9
4,4'-oxydianiline	101-80-4*
4-chloroaniline	106-47-8
o-Dianisidine	119-90-4
4,4'-bi-o-toluidine	119-93-7
p-Cresidine	120-71-8*
2,4,5-trimethylaniline	137-17-7
4,4'-thiodianiline	139-65-1
4-Aminoazobenzene	60-09-3*
4-methoxy-m-phenylenediamine	615-05-4
4,4-Methylenedi-o-toluidine	838-88-0*
2,6-xylydine	87-62-7
o-Anisidine	90-04-0*
2-Naphthylamine	91-59-8
3,3-Dichlorobenzidine	91-94-1
Biphenyl-4-ylamine	92-67-1*
Benzidine	92-87-5
o-Toluidine	95-53-4*
2,4-xylydine	95-68-1
4-Chloro-o-toluidine	95-69-2
4-methyl-m-phenylenediamine	95-80-7*
o-Aminoazotoluene	97-56-3*
5-Nitro-o-toluidine	99-55-8
* SVHC substances	

Appendix 3

List of 15 carcinogenic dye stuffs

C.I. Name	CAS RN
C.I. Direct Brown 95	16071-86-6
C.I. Direct Black 38	1937-37-7
C.I. Disperse Blue 1	2475-45-8
C.I. Direct Blue 6	2602-46-2
C.I. Acid Red 26	3761-53-3
C.I. Basic Red 9	569-61-9
C.I. Direct Red 28	573-58-0
C.I. Basic Violet 14	632-99-5
C.I. Disperse Orange 11	82-28-0
C.I. Disperse Orange 149	85136-74-9
C.I. Solvent Blue 4	6786-83-0*
C.I. Basic Blue 26,	2580-56-5*
C.I. Basic Violet 3	548-62-9*
Michler's base	101-61-1*
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1*

*SVHC substances

Appendix 4

List of SVHC Lead compounds

Name	CAS RN
Lead chromate	7758-97-6
Lead sulfochromate	1344-37-2
Lead chromate molybdate sulphate	12656-85-8
Lead dipicrate	6477-64-1
Lead styphnate	15245-44-0
Lead diazide	13424-46-9
Lead hydrogen arsenate	7784-40-9
Lead monoxide (Lead oxide)	1317-36-8
Orange lead (Lead tetroxide)	1314-41-6
Lead bis(tetrafluoroborate)	13814-96-5
Trilead bis(carbonate)dihydroxide	1319-46-6
Lead titanium trioxide	12060-00-3
Lead titanium zirconium oxide	12626-81-2
Lead(II) bis(methanesulfonate)	17570-76-2
Silicic acid, lead salt	11120-22-2
Silicic acid (H ₂ SiO ₅), barium salt (1:1), leaddoped	68784-75-8
Acetic acid, lead salt, basic	51404-69-4
Lead oxide sulfate	12036-76-9
[Phthalato(2-)]dioxotrilead	69011-06-9
Dioxobis(stearato)trilead	12578-12-0
Fatty acids, C16-18, lead salts	91031-62-8
Lead cyanamate	20837-86-9
Lead dinitrate	10099-74-8
Pentalead tetraoxide sulphate	12065-90-6
Pyrochlore, antimony lead yellow	8012-00-8
Sulfurous acid, lead salt, dibasic	62229-08-7
Tetraethyllead	78-00-2
Tetralead trioxide sulphate	12202-17-4
Trilead dioxide phosphonate	12141-20-7

Appendix 5 Phthalate esters

Acronym	CAS RN
DEHP	117-81-7
DBP	84-74-2
BBP	85-68-7
DINP	28553-12-0 & 68515-48-0
DIDP	26761-40-0 & 68515-49-1
DNOP	117-84-0
DIBP	84-69-5
DIHP	71888-89-6
DHNUP	68515-42-4
DMEP	117-82-8
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
DIPP	605-50-5
N-pentyl-isopentylphthalate	776297-69-9
Dipentyl phthalate (DPP)	131-18-0
Dihexyl phthalate	84-75-3
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters with $\geq$ 0.3% of dihexyl phthalate (CAS 84-75-3):	68515-51-5
1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq$ 0.3% of dihexyl phthalate (CAS 84-75-3):	68648-93-1

Appendix 6**List of Chlorinated organic solvents**

Constituent	CAS RN
Chloroform	67-66-3
1,1,2 Trichloroethane	79-00-5
1,1,2,2 Tetrachloroethane	79-34-5
1,1,1,2 Tetrachloroethane	630-20-6
Pentachloroethane	76-01-07
1,1 Dichloroethylene	75-35-4
Carbon tetrachloridetetrachloromethane	56-23-5
1,1,1 Trichloroethane, methyl chloroform	71-55-6
Trichloroethylene	79-01-06
1,2,3-trichloropropane	96-18-4
Trichloroethylene	79-01-06

Appendix 7**List of other organic solvents**

Constituent	Acronym	CAS RN
N,N-dimethylformamide	DMFa	68-12-02
N, N dimethylacetamide	DMAC	127-19-5
N-methyl-2- pyrrolidone	NMP	872-50-4

Appendix 8**List of PAH (= PolyAromatic Hydrocarbons) banned in EU/EEA**

PAH name	REACH Annex XVII	CAS RN
Benzo(j)fluoranthene	x	205-82-3
Benzo(b)fluoranthene	x	205-99-2
Benzo(k)fluoranthene	x	207-08-9
Benzo(a)phenanthrene (chrysene)	x	218-01-9
Benzo(a)pyrene	x	50-32-8
Dibenzo(a,h)anthracene	x	53-70-3
Benzo(a)anthracene	x	56-55-3
Benzo(e)pyrene	x	192-97-2

Appendix 9**List of Boric acid, borate compounds**

Substance name	CAS RN
Boric acid	10043-35-3 and 11113-50-1
Disodium tetraborate anhydrous;	1303-96-4, 12179-04-3, 1330-43-4
Tetraboron disodium heptaoxid, hydrate	12267-73-1
Sodium perborate; perboric acid, sodium salt	234-390-0
Sodium peroxometaborate,	32-04-04

Appendix 10:**Regulated per- and polyfluorinated compounds (PFAS)**

All regulated per and polyfluorinated substances.

Fuoro chemicals (PFAS)	Abbr.	CAS RN	Norway	REACH candidate List (SVHC)	REACH annex XVII	EU POP Regulation	Stockholm convention
Perfluorooctane sulfonic acid and related substances	PFOS	1763-23-1				X	Restriction annex B
Perfluorohexane sulfonic acid	PFHxS	108427-53-8					Pending
Perfluorooctanoic acid and related substances	PFOA	335-67-1	Restricted (and 7 related substances)	X	Restriction proposal		POP candidate
Perfluorononan-1-oic-acid	PFNA	375-95-1		X			
Nonadecafluorodecanoic acid (incl. Its sodium and ammonium salts).	PFDA	3108-42-7 335-76-2 3830-45-3		X			
NH ₄ - Perfluorononan-1-oate	NH ₄ -PFNO	4149-60-4		X			
Na- Perfluorononan-1-oate	Na-PFNO	21049-39-8		X			
Pentacosfluorotridecanoic acid	PFTTrDA	72629-94-8		X			
Tricosfluorododecanoic acid	PFD _o A	307-55-1		X			
Henicosfluoroundecanoic acid	PFUnA	2058-94-8		X			
Heptacosfluorotetradecanoic acid	PFTA	376-06-7		X			
1H,1H,2H,2H-Perfluoro-1-octanol	6:2 FTOH	647-42-7					
1H,1H,2H,2H-Perfluoro-1-decanol	8:2 FTOH	678-39-7					
1H,1H,2H,2H-Perfluorododecane-1-ol	10:2 FTOH	865-86-1					

COMPLIANCE COMMITMENT

The undersigned hereby affirms that they fully understand and apply to this RSL and chemical contract at all times of its validity.

Company name

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Date

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Signature

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