

Evonik Corporation • P.O.Box 34628 • Richmond, VA 23234

Jan 18, 2016

To all Evonik customers

Evonik Corporation
7801 Whitepine Road,
Richmond, VA 23237
www.evonik.com
Phone +1 804 727-0751
Fax +1 727-0855
Cell +1 804 338-3147
Joerg.simpelkamp@evonik.com

Evonik Product: Varisoft 222 LM 90%

Please be advised that the following substances are not intentionally added to the products listed above, and are not known or expected to be present. Their content is not specified and not routinely analyzed:

- REACH Substances of Very High Concern (SVHC)
(<http://echa.europa.eu/web/guest/candidate-list-table>)
- Substances listed on the Oekotex standard list attached below, with the exception of:
Organic Volatiles (<15 %. see composition section of the SDS)

Best regards,



Dr. Joerg Simpelkamp
Sr. Product Manager
BL Interface&Performance

-This statement is valid unsigned -

Limit values and fastness, part 1

Product Class	I Baby	II in direct contact with skin	III with no direct contact with skin	IV Decoration material
pH value¹				
	4.0 - 7.5	4.0 - 7.5	4.0 - 9.0	4.0 - 9.0
Formaldehyde [mg/kg]				
Law 112	n.d. ²	75	300	300
Extractable heavy-metals [mg/kg]				
Sb (Antimony)	30.0	30.0	30.0	
As (Arsenic)	0.2	1.0	1.0	1.0
Pb (Lead)	0.2	1.0 ³	1.0 ³	1.0 ³
Cd (Cadmium)	0.1	0.1	0.1	0.1
Cr (Chromium)	1.0	2.0	2.0	2.0 ⁴
Cr(VI)	under detection limit ⁵			
Co (Cobalt)	1.0	4.0	4.0	4.0
Cu (Copper)	25.0 ⁶	50.0 ⁶	50.0 ⁶	50.0 ⁶
Ni (Nickel) ⁷	1.0 ⁸	4.0 ⁹	4.0 ⁹	4.0 ⁹
Hg (Mercury)	0.02	0.02	0.02	0.02
Heavy metals in digested sample [mg/kg]¹⁰				
Pb (Lead)	90.0	90.0 ³	90.0 ³	90.0 ³
Cd (Cadmium)	40.0	40.0 ³	40.0 ³	40.0 ³
Pesticides [mg/kg]^{11, 12}				
Sum ¹²	0.5	1.0	1.0	1.0
Chlorinated phenols [mg/kg]¹²				
Pentachlorophenol (PCP)	0.05	0.5	0.5	0.5
Tetrachlorophenols (TeCP), Sum	0.05	0.5	0.5	0.5
Trichlorophenols (TrCP), Sum	0.2	2.0	2.0	2.0
Phthalates [w-%]¹³				
DINP, DNOP, DEHP, DHxP, DIDP, DIHxP, BBP, DBP, DIBP, DIHP, DHNUP, DHP, DMEP, DPP, Sum ¹²	0.1			
DEHP, BBP, DBP, DHxP, DIBP, DIHP, DIHxP, DHNUP, DHP, DMEP, DPP, Sum ¹²		0.1	0.1	0.1

Limit values and fastness, part 2

Product Class	I Baby	II in direct contact with skin	III with no direct contact with skin	IV Decoration material
Organic tin compounds [mg/kg] ¹²				
TBT	0.5	1.0	1.0	1.0
TPhT	0.5	1.0	1.0	1.0
DBT	1.0	2.0	2.0	2.0
DOT	1.0	2.0	2.0	2.0
Other chemical residues				
OPP [mg/kg] ¹²	50.0	100.0	100.0	100.0
Arylamines [mg/kg] ^{12, 14}	none ⁵			
SCCP [w-%] ¹²	0.1	0.1	0.1	0.1
TCEP [w-%] ¹²	0.1	0.1	0.1	0.1
DMFu [mg/kg] ¹²	0.1	0.1	0.1	0.1
Colorants				
Cleavable arylamines ¹²	not used ⁵			
Carcinogens ¹²	not used			
Allergens ¹²	not used ⁵			
Others ¹²	not used ⁵			
Chlorinated benzenes and toluenes [mg/kg] ¹²				
Sum	1.0	1.0	1.0	1.0
Polycyclic aromatic hydrocarbons (PAH) [mg/kg] ¹⁵				
Benzo[a]pyrene	0.5	1.0	1.0	1.0
Benzo[e]pyrene	0.5	1.0	1.0	1.0
Benzo[a]anthracene	0.5	1.0	1.0	1.0
Chrysene	0.5	1.0	1.0	1.0
Benzo[b]fluoranthene	0.5	1.0	1.0	1.0
Benzo[j]fluoranthene	0.5	1.0	1.0	1.0
Benzo[k]fluoranthene	0.5	1.0	1.0	1.0
Dibenzo[a,h]anthracene	0.5	1.0	1.0	1.0
Sum ¹²	5.0	10.0	10.0	10.0
Biological active products				
	none ¹⁶			

Flame retardant products	
General	none ^{17, 16}

Limit values and fastness, part 3

Product Class	I Baby	II in direct contact with skin	III with no direct contact with skin	IV Decoration material
Solvent residues [w-%] ^{18, 19}				
NMP ²⁰	0.1	0.1	0.1	0.1
DMAc	0.1	0.1	0.1	0.1
DMF	0.1	0.1	0.1	0.1
Formamide	0.02	0.02	0.02	0.02
Surfactant, wetting agent residues [mg/kg]				
OP, NP, Sum	10.0	10.0	10.0	10.0
OP, NP, OP(EO)₁₋₂₀, NP(EO)₁₋₂₀ Sum	100.0	100.0	100.0	100.0
PFC's, Perfluorinated Compounds ^{12, 21}				
PFOS [µg/m ²]	<1.0	<1.0	<1.0	<1.0
PFOA [µg/m ²]	<1.0	<1.0	<1.0	<1.0
PFUdA [mg/kg]	0.05	0.1	0.1	0.5
PFDaA [mg/kg]	0.05	0.1	0.1	0.5
PFTTrDA [mg/kg]	0.05	0.1	0.1	0.5
PFTTeDA [mg/kg]	0.05	0.1	0.1	0.5
Colour fastness (staining)				
To water	3	3	3	3
To acidic perspiration	3 - 4	3 - 4	3 - 4	3 - 4
To alkaline perspiration	3 - 4	3 - 4	3 - 4	3 - 4
To rubbing, dry ^{22, 23}	4	4	4	4
To saliva and perspiration	fast			

Limit values and fastness, part 4

Product Class	I Baby	II in direct contact with skin	III with no direct contact with skin	IV Decoration material
Emission of volatiles [mg/m³]²⁴				
Formaldehyde [50-00-0]	0.1	0.1	0.1	0.1
Toluene [108-88-3]	0.1	0.1	0.1	0.1
Styrene [100-42-5]	0.005	0.005	0.005	0.005
Vinylcyclohexene [100-40-3]	0.002	0.002	0.002	0.002
4-Phenylcyclohexene [4994-16-5]	0.03	0.03	0.03	0.03
Butadiene [106-99-0]	0.002	0.002	0.002	0.002
Vinylchloride [75-01-4]	0.002	0.002	0.002	0.002
Aromatic hydrocarbons	0.3	0.3	0.3	0.3
Organic volatiles	0.5	0.5	0.5	0.5
Determination of odours				
General	no abnormal odour ²⁵			
SNV 195 651 (Modified) ²⁴	3	3	3	3
Banned fibres				
Asbestos	not used			

(1) Exceptions for products which must be treated wet during the further processing: 4.0 - 10.5; for foams: 4.0 - 9.0; for leather products in product class IV (coated or laminated): 3.5 - 9.0

(2) n.d. corresponds according to „Japanese Law 112“ test method with an absorbance unit less than 0.05 resp. <16 mg/kg

(3) No requirement for accessories made from glass

(4) For leather articles 10.0 mg/kg

(5) Quantification limits: for Cr(VI) 0.5 mg/kg, for Cr(VI) in leather 3.0 mg/kg, for arylamines 20 mg/kg, for dyestuffs 50 mg/kg

(6) No requirement for accessories made from inorganic materials

(7) Including the requirement by EC-Regulation 1907/2006

(8) For metallic accessories and metallized surfaces: 0.5 mg/kg

(9) For metallic accessories and metallized surfaces: 1.0 mg/kg

(10) Applicable to all non textile accessories and components as well as for spun dyed fibres and articles containing pigments

(11) For natural fibres only

(12) The individual substances are listed in Appendix 5

(13) For coated articles, plastisol prints, flexible foams, and accessories made from plastics

(14) For all materials containing polyurethane or other materials which may contain free carcinogenic arylamines

(15) For all synthetic fibres, yarns, or threads and for plastic materials

(16) With exception of treatments accepted by Oeko-Tex® (see actual list on <http://www.oeko-tex.com>)

(17) Accepted flame retardant products do not contain any of the banned flame retardant substances listed in Appendix 5 as active agent.

(18) Exception for products which must be treated hot (in wet or dry stage) during further processing: 3.0 %

(19) For fibre, yarns and coated articles, where solvents are used during production.

(20) Exception for spun dyed fibres used for PPE: 3.0 %

(21) For all materials with a water and oil repellent finish or coating

(22) No requirements for 'wash-out' – articles

(23) For pigment, vat or sulphurous colorants a minimum grade of colour fastness to rubbing of 3 (dry) is acceptable

(24) For textile carpets, mattresses as well as foams and large coated articles not being used for clothing

(25) No odour from mould, high boiling fraction of petrol, fish, aromatic hydrocarbons or perfume

Compilation of the individual substances, Pesticides

Name	CAS-Nr.
2,4,5-T	93-76-5
2,4-D	94-75-7
Azinophosmethyl	86-50-0
Azinophosethyl	2642-71-9
Aldrine	309-00-2
Bromophos-ethyl	4824-78-6
Captafol	2425-06-1
Carbaryl	63-25-2
Chlordane	57-74-9
Chlordimeform	6164-98-3
Chlorfenvinphos	470-90-6
Coumaphos	56-72-4
Cyfluthrin	68359-37-5
Cyhalothrin	91465-08-6
Cypermethrin	52315-07-8
DEF	78-48-8
Deltamethrin	52918-63-5
DDD	53-19-0, 72-54-8
DDE	3424-82-6, 72-55-9
DDT	50-29-3, 789-02-6
Diazinon	333-41-5
Dichlorprop	120-36-2
Dicrotophos	141-66-2
Dieldrine	60-57-1
Dimethoate	60-51-5
Dinoseb, its salts and acetate	88-85-7 et al
Endosulfan, α -	959-98-8
Endosulfan, β -	33213-65-9
Endrine	72-20-8
Esfenvalerate	66230-04-4

Fenvalerate	51630-58-1
Heptachlor	76-44-8
Heptachloroepoxide	1024-57-3
Hexachlorobenzene	118-74-1
Hexachlorocyclohexane, α -	319-84-6
Hexachlorocyclohexane, β -	319-85-7
Hexachlorocyclohexane, δ -	319-86-8
Isodrine	465-73-6
Kelevane	4234-79-1
Kepone	143-50-0
Lindane	58-89-9
Malathion	121-75-5
MCPA	94-74-6
MCPB	94-81-5
Mecoprop	93-65-2
Metamidophos	10265-92-6
Methoxychlor	72-43-5
Mirex	2385-85-5
Monocrotophos	6923-22-4
Parathion	56-38-2
Parathion-methyl	298-00-0
Perthane	72-56-0
Phosdrin/Mevinphos	7786-34-7
Propethamphos	31218-83-4
Profenophos	41198-08-7
Quinalphos	13593-03-8
Strobane	8001-50-1
Telodrine	297-78-9
Toxaphene	8001-35-2
Trifluralin	1582-09-8

Compilation of the individual substances, Chlorinated phenols

Name	CAS-Nr.
Pentachlorophenol	87-86-5
2,3,5,6-Tetrachlorophenol	935-95-5
2,3,4,6-Tetrachlorophenol	58-90-2
2,3,4,5-Tetrachlorophenol	4901-51-3
2,3,4-Trichlorophenol	15950-66-0
2,3,5-Trichlorophenol	933-78-8
2,3,6-Trichlorophenol	933-75-5
2,4,5-Trichlorophenol	95-95-4
2,4,6-Trichlorophenol	88-06-2
3,4,5-Trichlorophenol	609-19-8

Compilation of the individual substances, Phthalates

Name	CAS-Nr.	Acronym
Butylbenzylphthalate	85-68-7	BBP
Dibutylphthalate	84-74-2	DBP
Di-(2-ethylhexyl)-phthalate	117-81-7	DEHP
Di-(2-methoxyethyl)-phthalate	117-82-8	DMEP
Di-C6-8-branched alkylphthalates, C7 rich	71888-89-6	DIHP
Di-C7-11-branched and linear alkylphthalates	68515-42-4	DHNUP
Di-hexylphthalate, branched and linear	68515-50-4	DHxP
Di-iso-butylphthalate	84-69-5	DIBP
Di-iso-decylphthalate	26761-40-0, 68515-49-1	DIDP
Di-iso-hexylphthalate		DIHxP
Di-iso-nonylphthalate	28553-12-0, 68515-48-0	DINP
Di-n-hexylphthalate	84-75-3	DHP
Di-n-octylphthalate	117-84-0	DNOP
Di-pentylphthalate (n-, iso-, or mixed)	131-18-0, 605-50-5, 776297-69-9, 84777-06-0	DPP

Compilation of the individual substances, Organic tin compounds

Name	Acronym
Tributyltin	TBT
Triphenyltin	TPhT

Dibutyltin	DBT
Diocetyl tin	DOT

Compilation of the individual substances, Arylamines having carcinogenic properties

Name	CAS-Nr.
MAK III, category 1	
4-Aminobiphenyl	92-67-1
Benzidine	92-87-5
4-Chloro-o-toluidine	95-69-2
2-Naphthylamine	91-59-8
MAK III, category 2	
o-Aminoazotoluene	97-56-3
2-Amino-4-nitrotoluene	99-55-8
p-Chloroaniline	106-47-8
2,4-Diaminoanisole	615-05-4
4,4'-Diaminobiphenylmethane	101-77-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
3,3'-Dimethyl-4,4'-diaminobiphenylmethane	838-88-0
p-Cresidine	120-71-8
4,4'-Methylene-bis- (2-chloroaniline)	101-14-4
4,4'-Oxydianiline	101-80-4
4,4'-Thiodianiline	139-65-1
o-Toluidine	95-53-4
2,4-Toluylendiamine	95-80-7
2,4,5-Trimethylaniline	137-17-7
o-Anisidine (2-Methoxyanilin)	90-04-0
2,4-Xylidine	95-68-1
2,6-Xylidine	87-62-7
4-Aminoazobenzene	60-09-3

Compilation of the individual substances, Dyestuffs and pigments classified as carcinogenic

C.I. Generic Name	C.I. Structure number	CAS-Nr.
C.I. Acid Red 26	C.I. 16 150	3761-53-3
C.I. Basic Red 9	C.I. 42 500	569-61-9
C.I. Basic Violet 14	C.I. 42 510	632-99-5
C.I. Direct Black 38	C.I. 30 235	1937-37-7
C.I. Direct Blue 6	C.I. 22 610	2602-46-2
C.I. Direct Red 28	C.I. 22 120	573-58-0
C.I. Disperse Blue 1	C.I. 64 500	2475-45-8
C.I. Disperse Orange 11	C.I. 60 700	82-28-0
C.I. Disperse Yellow 3	C.I. 11 855	2832-40-8
C.I. Pigment Red 104	C.I. 77 605	12656-85-8
C.I. Pigment Yellow 34	C.I. 77 603	1344-37-2

Compilation of the individual substances, Dyestuffs classified as allergenic

C.I. Generic Name	C.I. Structure number	CAS-Nr.
C.I. Disperse Blue 1	C.I. 64 500	2475-45-8
C.I. Disperse Blue 3	C.I. 61 505	2475-46-9
C.I. Disperse Blue 7	C.I. 62 500	3179-90-6
C.I. Disperse Blue 26	C.I. 63 305	
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 Blue 124		61951-51-7
C.I. Disperse Brown 1		23355-64-8
C.I. Disperse Orange 1	C.I. 11 080	2581-69-3
C.I. Disperse Orange 3	C.I. 11 005	730-40-5
C.I. Disperse Orange 37	C.I. 11 132	
C.I. Disperse Orange 76	C.I. 11 132	
C.I. Disperse Red 1	C.I. 11 110	2872-52-8
C.I. Disperse Red 11	C.I. 62 015	2872-48-2
C.I. Disperse Red 17	C.I. 11 210	3179-89-3
C.I. Disperse Yellow 1	C.I. 10 345	119-15-3
C.I. Disperse Yellow 3	C.I. 11 855	2832-40-8

C.I. Disperse Yellow 9	C.I. 10 375	6373-73-5
C.I. Disperse Yellow 39		
C.I. Disperse Yellow 49		

Compilation of the individual substances, Other banned dyestuffs

C.I. Generic Name	C.I. Structure number	CAS-Nr.
C.I. Disperse Orange 149		85136-74-9
C.I. Disperse Yellow 23	C.I. 26 070	6250-23-3

Compilation of the individual substances, Chlorinated benzenes and toluenes

Dichlorobenzenes
Trichlorobenzenes
Tetrachlorobenzenes
Pentachlorobenzenes
Hexachlorobenzene
Chlorotoluenes
Dichlorotoluenes
Trichlorotoluenes
Tetrachlorotoluenes
Pentachlorotoluene

Compilation of the individual substances, Polycyclic aromatic hydrocarbons (PAH)

Name	CAS-Nr.
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Benzo[a]anthracene	56-55-3
Benzo[a]pyrene	50-32-8
Benzo[b]fluoranthene	205-99-2
Benzo[e]pyrene	192-97-2
Benzo[ghi]perylene	191-24-2
Benzo[j]fluoranthene	205-82-3
Benzo[k]fluoranthene	207-08-9
Chrysene	218-01-9
Cyclopenta[c,d]pyrene	27208-37-3

Dibenz[a,h]anthracene	53-70-3
Dibenzo[a,e]pyrene	192-65-4
Dibenzo[a,h]pyrene	189-64-0
Dibenzo[a,i]pyrene	189-55-9
Dibenzo[a,l]pyrene	191-30-0
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno[1,2,3-cd]pyrene	193-39-5
1-Methylpyrene	2381-21-7
Naphthalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0

Compilation of the individual substances, Forbidden flame retardant substances

Name	CAS-Nr.	Acronym
Boric acid	10043-35-3, 11113-50-1	
Decabromodiphenylether	1163-19-5	decaBDE
Diboron trioxide	1303-86-2	
Disodium tetraborate, anhydrous	1303-96-4, 1330-43-4, 12179-04-3	
Heptabromodiphenylether	various	heptaBDE
Hexabromocyclododecane	25637-99-4	HBCDD
Hexabromodiphenylether	36483-60-0	hexaBDE
Octabromodiphenylether	32536-52-0	octaBDE
Pentabromodiphenylether	32534-81-9	penta BDE
Polybrominated biphenyles	59536-65-1	PBB
Short chain chlorinated paraffins (C10 - C13)	85535-84-8	SCCP
Tetrabromodiphenylether	various	tetraBDE
Tetraboron disodium heptaoxide, hydrate	12267-73-1	
Tri-(2,3-dibromopropyl)-phosphate	126-72-7	TRIS
Tris-(2-chloroethyl)phosphate	115-96-8	TCEP
Tris-(1,3-dichlor-2-propyl)phosphate	13674-87-8	TDCPP
Tris-(aziridiny)-phosphinoxide)	545-55-1	TEPA
Trixylylphosphate	25155-23-1	TXP

Compilation of the individual substances, Solvent residues

Name	CAS-Nr.	Acronym
1-Methyl-2-pyrrolidone	872-50-4	NMP
N,N-Dimethylacetamide	127-19-5	DMAc
Dimethylformamide	68-12-2	DMF

Compilation of the individual substances, Surfactant, wetting agent residues

Name	CAS-Nr.	Acronym
Nonylphenol	various	NP
Octylphenol	various	OP
Octylphenoethoxylates	various	OP(EO)
Nonylphenoethoxylates	various	NP(EO)

Compilation of the individual substances, Other chemical residues

Name	CAS-Nr.	Acronym
o-Phenylphenol	90-43-7	OPP
Short chained chlorinated paraffines (C10 - C13)	85535-84-8	SCCP
Tris(2-chloroethyl)phosphate	115-96-8	TCEP
Dimethylfumarate	624-49-7	DMFu