

Tapiflex Ranges

Issued to:	TARKETT
Product specifications	Tapiflex Essential 3/50, Essential 4/65, Excellence 3/65, Excellence 4/80, Excellence Genius 3/63, Excellence Genius 4/70, Platinum 3/90, Platinum 4/100, Stairs, Ruby 70 Acoustic, Classic, Modulaire, Habitat, Habitat Genius
Issue date:	November 20., 2020. Reprint September 3 rd , 2021
Expiration date:	November 19., 2022
Evaluation threshold:	At least 100 ppm of the final product
After-use scenario:	TARKETT ReStart® Program
EPEA Registry No:	39943.2
MHS Version:	2.0

FUNCTION	CHEMICAL	CAS	AVERAGE CONTENT	EPEA RATING	COMMENT	GS-LT GS-BM	REACH
Polymer	PVC*	9002-86-2	>37.5%		Transitional use of PVC is tolerated in durable applications designed with good materials and a collection and recycling program in place ^(a) . Vinyl chloride content is below 1 ppm in purchased products. Tarkett proposes to take back your installation residues and plans to propose to take back your products after use, thanks to the ReStart® program. Check Tarkett national websites for Restart program availability.	LT-P1	✓
	Polymerization additives*	Proprietary 3	<2%			N.I.	✓
Filler	Calcium carbonate*	13397-25-6	34.5		Fillers consist of pulverized calcium carbonate of virgin and recycled origin and aluminum hydroxide of the former PVC use. Low levels of quartz. No concern in the finished product. Acrylic urethane coating of former use acts here also as filler.	LT-UNK	✓
	Aluminum hydroxide*	1333-84-2				BM2	✓
	Crystalline silica - Quartz type*	14808-60-7				LT-1	✓
	Sodium oxide	12401-86-4				LT-UNK	✓
	Auxiliary (expected plant oil)	Proprietary 3				N.I.	✓
	Acrylic urethane prepolymer dispersion*	Proprietary 3				N.I.	✓
Plasticizer	1,2-Cyclohexanedicarboxylic acid, 1,2-diisononyl ester (DINCH)*	166412-78-8	22.3%		Alternatives to phthalate plasticizers. DINCH is produced by hydrogenation of DINP with thus modified properties. No toxicity identifiable, especially no mutagenicity, carcinogenicity or reproductive toxicity observed in animal tests. Capacity of MINCH (primary metabolic product of DINCH) to interfere with the metabolism and differentiation of adipocytes in in-vitro experiments was assumed in 2015 but convincingly refuted in more recent scientific publications. DBT is an equivocal sensitizer. No concern expected with DBT and its synthesis impurity MBT.	LT-UNK	✓
	Bis(2-ethylhexyl)adipate (DOTP)*	123-79-5				LT-P1	✓
	Dibutyl terephthalate (DBT)*	1962-75-0				None	✓
	1,2,3-Propanetricarboxylic acid, 2-(acetyloxy)-, tributyl ester*	77-90-7				LT-P1	✓
	Isodecyl benzoate	131298-44-7				N.I.	✓
	Terephthalic acid, butyl methyl ester (MBT)*	52392-55-9				N.I.	✓
	1,2-Cyclohexanedicarboxylic acid, isononyl methyl ester (MINCH)*	Proprietary 3				N.I.	✓

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Carrier	Fiber glass*	65997-17-3	1.2%		The length of glass fibers exceeds 10 µm. No contribution of the formaldehyde-based binder to formaldehyde emissions of the flooring product. No concern seen.	LT-UNK	✓
	Urea melamine formaldehyde resin	25036-13-9				LT-UNK	✓
	Other binder	Proprietary 3				N.I.	✓
	Fiber spinning oil	Proprietary 3				N.I.	✓
	Proprietary	Proprietary 2				LT-UNK	✓
Stabilizer	Soybean oil, epoxidized*	8013-07-8	0,9%		ESBO is a scavenger of hydrochloric acid (that may be formed during the flooring use period) with plasticizing effect. Zinc is essential trace element. Migration potential of the different components of the heat stabilization system is unknown.	LT-P1	✓
	Zinc oxide	1314-13-2				LT-P1	✓
	Triisodecyl phosphite*	25448-25-3				LT-P1	✓
	Triisotridecyl phosphite	77745-66-5				LT-P1	✓
	2-(2-n-Butoxyethoxy) ethanol	112-34-5				LT-P1	✓
	Dibenzoylmethane	120-46-7				LT-UNK	✓
	Zinc 2-ethylcaproate	136-53-8				LT-P1	✓
	Distillates (petroleum), hydrotreated light	64742-47-8				LT-UNK	✓
Additives	Calcium oxide	1305-78-8	3.3%		Additives and formulation auxiliaries that have a function in the product or had a function to produce raw materials. Azodicarbonamide decomposes to toxicologically benign air components during the application and therefore loses its mutagenic potential and sensitization, the last being justification for classification as substance of very high concern (SVHC) in the EU. It is mentioned in this context but not counted in the content figure, since as such it is absent in Tapiflex products. N-Methylpyrrolidone is classified H360D (May damage the unborn child, Category 1). This substance is present slightly above the declaration limit of 100 ppm in some of covered product specifications, only. No concern seen in effect.	LT-P1	✓
	Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-*	25322-68-3				LT-UNK	✓
	Silicon dioxide	69012-64-2				LT-1	✓
	Fatty acids, C16-18	67701-03-5				LT-UNK	✓
	Water	7732-18-5				BM4	✓
	Azodicarbonamide	123-77-3				LT-UNK	✓
	Ethanol	64-17-5				N.I.	✓
	Aluminum oxide	1344-28-1 1302-74-5				BM1 LT-UNK	✓
	Ethanol, 2-butoxy-, phosphate (3:1)	78-51-3				LT-P1	✓
	Isopropyl alcohol	67-63-0				LT-UNK	✓
	1-Propanone, 2-hydroxy-2-methyl-1-[4-(1-methylethenyl)phenyl]-, homopolymer	163702-01-0				None	✓
	Zirconium dioxide	1314-23-4				LT-UNK	✓
	Aluminum	12770-50-2				BM1	✓
	N-Methylpyrrolidone	872-50-4				BM1	✓
	1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]-	1760-24-3				LT-UNK	✓
	Oxirane, 2-methyl-, polymer with oxirane, mono (3,5,5-trimethylhexyl) ether	204336-40-3				LT-UNK	✓
Proprietary*	Proprietary 2 Proprietary 3		LT-UNK N.I.	✓ ✓			
Pigments	Titanium Dioxide*	13463-67-7	0.8%		Potential health issue related to dust inhalation during mining/production of titanium dioxide. No concern in the finished product. Chlorinated and copper containing pigments are not recommended in the context of PVC.	LT-1	✓
	Carbon Black	1333-86-4				BM1	✓
	Pigment Blue 15:1	12239-87-1				LT-UNK	✓
	Pigment Yellow 93	5580-57-4				LT-P1	✓
	Pigment Green 7	1328-53-6				LT-UNK	✓
Coating	Urea, polymer with formaldehyde*	9011-05-6	0.2%		Complex coating macropolymer based on polyurethane acrylate and melamine urea formaldehyde chemistry that is UV cured during application. Monomers mentioned aren't present as such and have therefore lost properties that leads to specification for hazard labeling of rwa materials. The coating doesn't contribute to a formaldehyde emission as verified by analysis. Triethylamine is object of restrictions within REACH legislation in Europe that don't apply in effect in this application.	LT-P1	✓
	Pentaerythritol tetraacrylate	4986-89-4				LT-UNK	✓
	Pentaerythritol triacrylate	3524-68-3				LT-P1	✓
	Triethylamine	121-44-8				LT-UNK	✓
	Ethyl (2,4,6-Trimethylbenzoyl)-phenyl phosphinate	84434-11-7				LT-P1	✓
	1,6-Hexandioldiacrylate	13048-33-4				LT-P1	✓
	Proprietary	Proprietary 2				LT-UNK	✓
	Modified acrylic copolymer	Proprietary 3				LT-UNK N.I.	✓ ✓

FUNCTION	CHEMICAL	CAS	AVERAGE CONTENT	EPEA RATING	COMMENT	GS-LT GS-BM	REACH
THEREOF:							
Content sourced from abundant minerals			34.1%		Calcium carbonate used as predominant filler is obtained from abundant mineral resources.		
Recycled content	- Internal post-industrial source (Reprocessed own production output)		13.2%		Raw materials used to generate the recycled content have all an industrial pre-use origin and therefore chemically largely defined. The contribution of the recycled content is highlighted with * after the chemical name.		
	- Post-installation / Pre-use source						
	- Post-use source		-				
Biologically renewable content	- Animal		-		No raw materials of animal origin identifiable in the product build-up.		
	- Vegetal		< 1%		Epoxidized Soybean oil and fatty acid derivatives are obtained from vegetal sources		

EPEA's rating methodology is based on the Cradle to Cradle approach with the European Precautionary principle. It is made in relation with a quality target, an after-use scenario and on the background of the specific supply chain materials used by the article's manufacturer. The assessment of hazard/safety properties of chemicals is made at the best of our knowledge at the date of MHS™ issue (See further [MHS development Guidance V2.0](#)). EPEA believes the data forth herein are accurate as of the date hereof. EPEA makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation, and verification.


Dr. Peter Möslé
 Partner & Managing Director


Dr. Alain Rivière
 Scientific Supervisor



Legend:

EPEA RATING:

- No concern
- Moderate concern
- High concern – Task for material optimization
- Unknown concern - Task for knowledge development

REACH compliance:

- ✓: Substance is listed neither in Annex XIV nor in Annex XVII nor as SVHC and complies with European Union Regulation EC 1907/2006 applicable to this article.
- XVII** or **XIV**: Substance listed in Annex XVII (Restriction) or Annex XIV (Authorisation) of REACH regulation applicable to this article
- SVHC**: Substance of Very High Concern. Candidate for listing in Annex XIV (Authorization list) of REACH Regulation at a concentration above 0.1%
- : Not applicable due to missing CAS

GS-LT^(b)

- LT-1**: Chemical is found on an authoritative list of the most-toxic chemicals
- LT-P1**: Chemical may be a serious hazard, but the confidence level is lower
- LT-UNK**: Unknown (no data on List Translator Lists)

GS- BM^(b)

- BM1**: Avoid: Chemical of High Concern
- BM2**: Use but search for Safer Substitutes
- BM3**: Use but still opportunity for improvement
- BM4**: Prefer: Safer Chemical
- BMU**: "Unspecified"; insufficient data
- N.I.** (No GS rating): Chemical is not listed in the source of GS and GS-LT ratings

(a) Please refer to [EPEA's position on PVC and chlorine management](#)

(b) GreenScreen List Translator Score and GreenScreen Benchmark Score according to [Toxnot](#)

Proprietary 1, 2 or 3: Distinguishing between owners of information (see [MHS development Guidance V2.0](#))