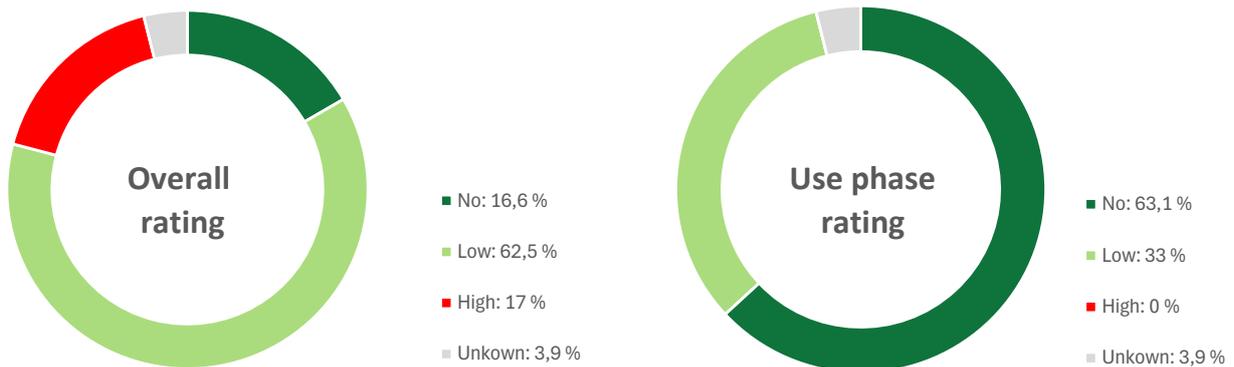


HETEROGENEOUS COMPACT

Company:	TARKETT
Product specifications:	Meteor 70, Classic 40, Ruby 70, Topaz 70, Excellence genius 3-4, Excellence genius 70, Essential 3, Essential 4, Multisafe aqua, Excellence 80
Issue date:	18. September 2025
Expiration date:	17. September 2027
Declaration and evaluation threshold:	At least 100 ppm of the final product
After-use scenario:	ReStart® recycling and take-back programme ^(a)
EPEA Registry No:	45603
MHS Version:	3.0

Chemicals Risk Assessment: Concern level



This summary presents the average mass weighted distribution of material health ratings presented on next pages. Ratings address benefits and risks of chemical components of the product for humans and the living environment:

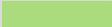
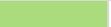
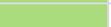
* during the phase of use of the product.

* overall while taking into account

- the last manufacturing step using raw materials leading to them in the product's composition,
- the production of raw materials in the supply chain as far as information is attainable from suppliers or from generic literature,
- the intended management scenario after use.

The benefit and risk analysis follows a qualitative and quantitative breakdown of the product's chemical composition from the chemical composition of raw materials, a reconstruction of chemical transformation pathways and an anticipation of the chemical's behaviour during the intended after-use processing. This information is combined with physical and (eco)toxicological properties of pure chemicals obtained from governmental and non-governmental scientific organisations to derive a level of concern. The MHS is making transparent at a point in time results of the company's activities for developing benefits of the product, including environmental and health benefits, with its purchasing and commercialization practices.

FUNCTION	CHEMICALS (Maximally present at $\geq 0,01\%$)	CAS	CONTENT (average)	EPEA RATING		GS-LT GS-BM ^(c)	REACH
				USE PHASE	OVERALL		
PVC	Polyvinyl chloride	9002-86-2	$\geq 33,3\%$			LT-P1	✓
	Proprietary	Proprietary	$\leq 3,9\%$			N.I.	-
	<p>Transitional use of PVC is tolerated in durable applications designed with good materials and a collection and recycling program in place^(b). 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^(a). The PVC resin products are produced with chlorine originating from membrane-based chloralkali processes according to today best available technologies. Suppliers of the PVC resin products do not disclose the identity of polymerization auxiliaries. Mentioned amounts are estimate maxima based on scientific literature and the knowledge of the polymerization process type. Check Tarkett national websites for Restart[®] program availability.</p> <p>Nanomaterials: No</p>						
Fillers	Calcium carbonate	471-34-1	33,28%			LT-UNK	✓
	Quartz	14808-60-7				LT-1	✓
	Magnesite	546-93-0				LT-UNK	✓
	Limestone	1317-65-3				LT-UNK	✓
	Dolomite	16389-88-1				LT-UNK	✓
	Glass, oxide, chemicals	65997-17-3				LT-1	✓
	Aluminium hydroxide	21645-51-2				BM2	✓
	<p>Fillers consist of pulverized stones (calcium carbonate and dolomite) with mean particle sizes varying between 2,4 and 40 μm and both a primary and a recycling origin. Aluminium hydroxide acts as both a filler and a flame retardant. Minor amounts of glass oxide chemicals correspond to glass fibre veils contained in recycled flooring materials. They do not recover their original function but act also as a filling material instead. Different levels of concerns are related to quartz, a natural component of these stones that originate directly or indirectly - via recycled content - from mines. Especially a raw material consisting of particles with a mean size of 2,4 μm is a matter of concern during its production and its handling during the flooring production. No concerns in the final product because particles are embedded in the polymer matrix.</p> <p>Nanomaterials: No</p>						
Plasticizers	Bis(2-ethylhexyl) adipate (DOA)	103-23-1	25,30%			LT-P1	✓
	1,2-Cyclohexanedi-carboxylic acid, diisononyl ester (DINCH)	166412-78-8				LT-UNK	✓
	1,2-Cyclohexanedicarboxylic acid, 1-methyl, 2-isononyl ester (MINCH)	Not available				N.I.	✓
	Diethyl terephthalate (DOTP)	4654-26-6				None	✓
	Dibutyl terephthalate (DBT)	1962-75-0				None	✓
	1,4-benzenedicarboxylic acid, butyl methyl ester (MBT)	52392-55-9				N.I.	✓
	Tributyl O-acetylcitrate	77-90-7				LT-P1	✓
<p>DINCH, DOTP, DBT and DOA plasticizers are alternatives to phthalate plasticizers. DINCH and DOA are approved for food contact applications with high migration limit reflecting a much better safety profile. With DINCH no toxicity is identifiable, especially no mutagenicity, carcinogenicity or reproductive toxicity observed in animal tests. No concern as well with the synthesis impurity MINCH irrespective of its amount being $< 0.1\%$ in the total composition, and the two terephthalate plasticizers and the minor amount of citrate plasticizer in case of exposure.</p> <p>Nanomaterials: No</p>							

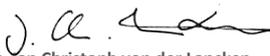
Heat stabilizers	Soybean oil, epoxidized (ESBO)	8013-07-8	0,91%			LT-P1	✓
	Zinc dibenzoate	553-72-0				LT-P1	✓
	Zinc neodecanoate	27253-29-8				LT-P1	✓
	Calcium neodecanoate	27253-33-4				LT-P1	✓
	Triisodecyl phosphite	25448-25-3				LT-P1	✓
	benzene, mono-C10-14-alkyl derivs., fractionation bottoms	85117-41-5				LT-UNK	✓
	Neodecanoic acid, zinc salt, basic	84418-68-8				LT-UNK	✓
	Other chemicals of a calcium/zinc heat stabilizing system	Proprietary				LT-P1	✓
					LT-1	✓	
					LT-P1	✓	
<p>ESBO is a scavenger of hydrochloric acid that may be formed during the flooring use period. It has a plasticizing effect in addition. Zinc and calcium are essential elements for life. The migration potential of the different components of the heat stabilization system is unknown but expected low.</p> <p>Nanomaterials: No</p>							
Reinforcement	Glass, oxide, chemicals	65997-17-3	1,57%			LT-1	✓
	<p>The dimensionstability of the flooring tiles is obtained with incorporation of a veil that consists of glass fibres bound with a polymeric binder (encompassed under additives and processing aids). The size of glass fibres ranges between 10 and 13 µm.</p>						
Coloration agents	Titanium dioxide	13463-67-7	0,52%			LT-1	✓
	Carbon black	1333-86-4				BM1	✓
	<p>Potential health issue related to dust inhalation during mining/production of titanium dioxide. Other pigments involved in inks are present at level below the consideration threshold.</p> <p>Nanomaterials: No for titanium dioxide, not verified for carbon black</p>						

Additives, processing aids, impurities	Silicic acid, aluminum sodium salt	1344-00-9	0,91%			LT-P1	✓
	Aluminium oxide	1344-28-1				LT-1	✓
	Magnesium hydroxide	1309-42-8				BM3	✓
	Calcium oxide	1305-78-8				LT-P1	✓
	Zinc oxide	1314-13-2				BM1	✓
	Polyvinylacetate	9003-20-7				LT-UNK	✓
	C,C'-azodi(formamide)	123-77-3				LT-P1	✓
	Fatty acids, C16-18	67701-03-5				LT-UNK	✓
	2,2'-oxydiethanol	111-46-6				LT-P1	✓
	Ethanol	64-17-5				BM2	✓
	Benzoic acid	65-85-0				LT-P1	✓
	Propan-2-ol	8013-70-5				LT1	✓
	Tris(2-butoxyethyl) phosphate	78-51-3				LT-P1	✓
	Urea, polymer with formaldehyde and 1,3,5-triazine-2,4,6-triamine	25036-13-9				LT-UNK	✓
	Triethylamine	121-44-8				LT-UNK	✓
	Polynoxylin	9011-05-6				LT-P1	✓
	Methanol	67-56-1				LT-1	✓
	Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, mono-C13-15-alkyl ethers, succinates	162627-31-8				None	✓
	2-(2-butoxyethoxy)ethanol	112-34-5				LT-P1	✓
	Silicon dioxide	7631-86-9				BM1	✓
	Alcohols, C11-14-iso-, C13-rich	68526-86-3				LT-P1	✓
	Distillates (petroleum), hydrotreated light	64742-47-8				LT-P1	✓
	Oxirane, 2-methyl-, polymer with oxirane, mono(3,5,5-trimethylhexyl) ether	204336-40-3				LT-UNK	✓
	N-(3-(trimethoxysilyl)propyl) ethylenediamine	1760-24-3				LT-UNK	✓
	Other additives, processing aids, impurities	Proprietary				LT-P1	✓
						LT-UNK	✓
						LT-UNK	✓
				LT-UNK	✓		
				LT-P1	✓		
				LT-P1	✓		
				N.I.	-		
<p>Chemicals in this section consist mostly of 1.) formulation auxiliaries for coloration agents, 2.) the undefined part of the production input that flows into the products's composition and chemicals that do not recover a function during recycling. The blowing agent C,C'-azodi(formamide) is a SVHC chemical that decomposes to benign gases during the blowing reaction and is absent in the product. A second chemical classified as SVHC for its respiratory sensitizing effect is involved at a level slightly above the declaration limit but below the legal declaration limit of 0,1% and not detected in VOC tests^(e). Undefined chemicals amount to about the the half of chemicals listed in this section. They are a task for further attempts to resolve the chemical definition gap.</p> <p>Nanomaterials: No for organic substances, not verified for mineral chemicals</p>							

Surface Treatment	2-hydroxy-2-methylpropiophenone	7473-98-5	0,30%			LT-P1	✓
	A mixture mainly based on: 2,3-dihydro-6-(2-hydroxy-2-methyl-1-oxopropyl)-1,1,3-trimethyl-3-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenyl]-1H-indene; 2,3-dihydro-5-(2-hydroxy-2-methyl-1-oxopropyl)-1,1,3-trimethyl-3-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenyl]-1H-indene	163702-01-0				None	✓
	2,2-bis[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate	4986-89-4				LT-UNK	✓
	2-Propenoic acid, 2-hydroxyethyl ester, polymer with 1,1'-methylenebis[4-isocyanatocyclohexane] and 2-oxepanone	52404-33-8				None	✓
	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate	42978-66-5				LT-P1	✓
	Oxybis(methyl-2,1-ethanediyl) diacrylate	57472-68-1				LT-P1	✓
	Hexamethylene diacrylate	13048-33-4				LT-P1	✓
	1,3-Isobenzofurandione, polymer with 1,4-butanediol, (chloromethyl)oxirane, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4,4'-(1-methylethylidene)bis[phenol] and oxirane, 2-propenoate	297145-34-7				None	✓
	Other surface treatment precursors	Proprietary				LT-P1	✓
						LT-UNK	✓
				LT-P1	✓		
<p>Mixture of precursors for the production of a complex polymeric structure via curing with photo-initiators that are themselves incorporated in the polymeric structure. The 3 red labeled surface treatment precursor relies on bisphenol A as a precursor, an endocrine disrupting chemical. The low level of concern is due to the fact that a release of bisphenol A as such is not expectable during the use phase.</p> <p>Nanomaterials: No</p>							

RESOURCE ORIGIN			
Content sourced from abundant minerals		41,60%	Mineral fillers and the chlorine part of PVC origine from abundant mineral resources. Amounts originating from the recycled content are not counted here again.
Recycled content	- Internal post-industrial	22,32%	Mainly internal post-industrial and to a small extent quality-controlled external post-industrial sources are involved.
	- Post-installation	-	
	- Post-use source	-	
Biologically renewable content	- Animal	-	No chemical components with a possible animal origin are identified. ESBO has a vegetal origin.
	- Vegetal	0,37%	

EPEA's rating methodology ^(d) 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. EPEA believes the data forth herein are accurate as of the date hereof. EPEA makes no warranty with respect thereto and expressly denies all liability for reliance thereon. Such data are offered solely for your consideration, investigation, and verification.



Dr. Jan Christoph von der Lancken
Managing Director EPEA Industry



Dr. Alain Rivière
Scientific Supervisor



Legend:

EPEA RATINGS	REACH compliance	GS-LT / GS- BM ^(a)
● No concern	✓: 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#	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) 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
● low concern		
● High concern. Task for material optimization		
● Risk cannot be verified. Task for knowledge development		

(a) ReStart® recycling and take-back programme

https://professionals.tarkett.com/en_EU/node/restart-recycling-take-back-programme-9721

(b) Charter for a responsible use of PVC and chlorine management

<https://www.epea.com/en/news/pvc-chlorine-management>

(c) GreenScreen List Translator Score and GreenScreen Benchmark Score according to 3E Exchange

<https://exchange.3eco.com/Substances/Search>

(d) EPEA MHS V3.0 Development Guidance

https://epea.com/fileadmin/user_upload/2.0_Leistungen/MHS_Guidance_document_V3.0_EPEA_15.09.2023.pdf

(e) Tarkett Indoor Air Quality Platinum certificate TIAQP-30-05-01-2023, issued by third party Eurofins Certification Body VOC for products representative of this Tarkett product group