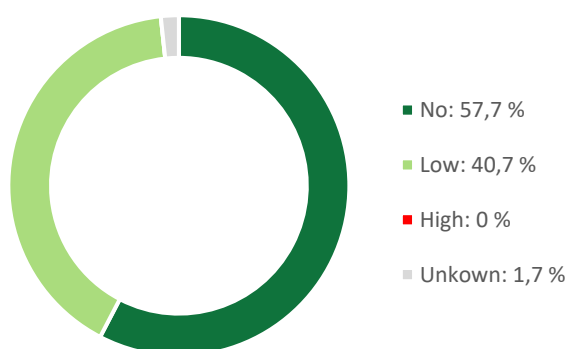


## iD Tilt Hit

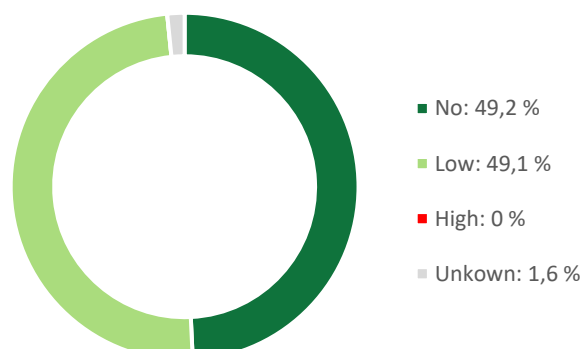
Company:	TARKETT
Product specifications	iD Tilt Hit
Issue date:	11. October 2024
Expiration date:	10. October 2026
Evaluation and declaration threshold:	At least 100 ppm of the final product
After-use scenario:	Tarkett proposes to take back your installation residues and your products after use, thanks to the <a href="#">TARKETT ReStart® Program</a> . <b>Check Tarkett national websites for Restart program availability</b>
40579.2	MHS_2024_D2_01.10.2024
MHS Version:	3.0

### Chemicals Risk Assessment: Concern level

Rating for the use phase



Overall rating



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.
- overallly while taking into account a) the last manufacturing step using raw materials leading to them in the product's composition, b) the production of raw materials in the supply chain as far as information is attainable from suppliers or from generic literature, and c) 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.

# iD Tilt Hit

FUNCTION	CHEMICAL	CAS	CONTENT	EPEA RATING		GS-LT GS-BM <sup>(a)</sup>	REACH	
				Use phase	Overall			
PVC	Polyvinylchloride	9002-86-2	38.5%			LT-P1	✓	
	PVC polymerization additives <sup>(b)</sup>	Proprietary <sup>(c)</sup>	0.4%			N.I.	-	
	<p><i>Transitional use of PVC is tolerated in durable applications designed with good materials and a collection and recycling program in place<sup>(d)</sup>. Vinyl chloride content is below 1 ppm in purchased products. 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.</i></p> <p>Nanomaterials: No.</p>							
Fillers	Calcium carbonate	471-34-1	45.5%			LT-UNK	✓	
	Magnesium carbonate	546-93-0				LT-UNK	✓	
	Crystalline silica - Quartz type <sup>(b)</sup>	14808-60-7				LT-1	✓	
<p><i>Fillers consist of pulverized calcium carbonate of virgin origin with particles with a mean size of &lt; 3 µm or 16 µm respectively. Low levels of quartz contained in calcium carbonate raw materials.</i></p> <p>Nanomaterials: No</p>								
Plasticizers	Terephthalic acid, dioctyl ester (DOTP, DEHT)	6422-86-2	11.5%			None	✓	
	Terephthalic acid, butyl methyl ester (MEHT) <sup>(b)</sup>	52392-55-9				N.I.	✓	
	<p><i>Alternative to phthalate plasticizers approved for food contact application with high migration limit reflecting a much better safety profile. No concern with DOTP, especially no disruption of developmental pathways observed with its metabolic products.</i></p> <p>Nanomaterials: No</p>							
Heat stabilizers	Soybean oil, epoxidized (ESBO)	8013-07-8	2.3%			LT-P1	✓	
	Other components of a calcium/zinc heat stabilizer components	Proprietary					LT-P1	✓
							LT-UNK	✓
							LT-UNK	✓
							LT-P1	✓
							LT-P1	✓
							LT-UNK	✓
							N.I.	-
<p><i>ESBO is a scavenger of hydrochloric acid that may be formed during the production and the flooring use period. It has additionally a plasticizing effect. The migration potential of hazardous components of the heat stabilization system is expected low if not even absent due to absence of volatility.</i></p> <p>Nanomaterials: No</p>								
Reinforcement	Glass veil	65997-17-3	0.9%			LT-1	✓	
	Urea, polymer with formaldehyde	9011-05-6				LT-P1	✓	
	Other binder components	Proprietary				N.I.		
<p><i>A glass fibre veil and a polyester veil are two alternatives for enhancing the dimension stability of iD Tilt Hit. They are encapsulated in the flooring matrix. The glass fibre based veil consists of fibres with a diameter exceeding 13 µm. No information on the specific binder composition (About 25% of the reinforcement system) but no concern seen.</i></p> <p>Nanomaterials: No</p>								

# iD Tilt Hit






FUNCTION	CHEMICAL	CAS	CONTENT	EPEA RATING		GS-LT GS-BM <sup>(a)</sup>	REACH
				Use phase	Overall		
Coloration agents	Titanium Dioxide	13463-67-7	0.5%			LT-1	✓
	Carbon Black	61512-59-2				BM1	✓
	Pigment Yellow 110	106276-80-6				LT-UNK	✓
	<p>The labelling of titanium dioxide with the H351i (Suspected of causing cancer via inhalation) applies to titanium dioxide in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm. This does not apply to titanium dioxide products used for the production of iD Tilt Hit. Potential health issue related to dust inhalation during mining/production of titanium dioxide raw materials not excluded, though. No concern in the finished product due to encapsulation in the polymer matrix.</p> <p>Chlorinated pigments are seen problematic because their demand contributes to stabilizing the general market offer of chemicals not supported by the charter for a responsible use of PVC and chlorine management<sup>(d)</sup>.</p> <p>Nanomaterials: No</p>						
Other additives, processing aids and impurities	Stearic acid	646-29-7	0.2%			LT-P1	✓
	Other additive	Proprietary				LT-UNK	✓
	<p>Additives and formulation auxiliaries that have a function in the product or had a function to produce raw materials. No concern seen.</p> <p>Nanomaterials: No</p>						
Surface Treatment	(octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate	42594-17-2	0.2%			LT-P1	✓
	Hexane, 1,6-diisocyanato-, homopolymer, 2-hydroxyethyl acrylate- and propylene glycol monoacrylate-blocked	1392411-89-0				LT-P1	✓
	Oxybis(methyl-2,1-ethanediy) diacrylate	57472-68-1				LT-P1	✓
	Other monomers	Proprietary				None	✓
	<p>Complex coating macropolymer based on polyurethane acrylate chemistry that is UV cured during application. It fulfils a double function as protection of the flooring against abrasion during use and barrier against migration of mobile chemicals to the indoor environment, therefore enabling that products fulfil most stringent VOC standards<sup>(e,f)</sup>. Most chemicals listed in this section are not present as such in the finished product anymore and have lost properties that lead to specification for hazard labelling of raw materials. While recycling within the ReStart® process, surface treatment lose their function and contribute as a filler without detrimental impacts to the safety properties of flooring products of the next generation.</p> <p>Nanomaterials: No</p>						
<b>THEREOF</b>							
Content sourced from abundant minerals		68.8%	Calcium carbonate and the chlorine of PVC originate from abundant mineral resource.				
Recycled content	- Internal post-industrial source (Reprocessed own production output)	13-15%	Id Tilt Hit is produced exclusively with primary raw materials.				
	- Post-installation / Pre-use source	-					
	- Post-use source	-					
Biologically renewable content	- Animal	-	No chemical with a possible animal origin is identified.				
	- Vegetal	1.8%	Epoxydized soybean oil is of vegetal origin.				

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 V3.0 Development Guidance](#)). 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 Möhle**  
 Partner & Managing Director

  
**Dr. Alain Rivière**  
 Scientific Supervisor

## Legend:

EPEA RATINGS	REACH compliance:	GS-LT <sup>(b)</sup>	GS- BM <sup>(b)</sup>
 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. <b>XVII</b> or <b>XIV</b> : Substance listed in Annex XVII (Restriction) or Annex XIV (Authorisation) of REACH regulation applicable to this article <b>SVHC</b> : 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	<b>LT-1</b> : Chemical is found on an authoritative list of the most-toxic chemicals	<b>BM1</b> : Avoid: Chemical of High Concern
 Low concern		<b>LT-P1</b> : Chemical may be a serious hazard, but the confidence level is lower	<b>BM2</b> : Use but search for Safer Substitutes
 High concern – Task for material optimization		<b>LT-UNK</b> : Unknown (no data on List Translator Lists)	<b>BM3</b> : Use but still opportunity for improvement
 Risk cannot be verified			<b>BM4</b> : Prefer: Safer Chemical
 Task for knowledge development			<b>BMU</b> : "Unspecified"; insufficient data
			<b>N.I.</b> (No GS rating): Chemical is not listed in the source of GS and GS-LT ratings

- (a) GreenScreen List Translator Score and GreenScreen Benchmark Score according to [3E Exchange](#)
- (b) Component originating either from the natural resource or from virgin or recycled raw material without functionality in the product's context.
- (c) Proprietary can be due to the decision of the producer or result from non-communication of the full composition of used raw materials either to producer, or to EPEA, or both.
- (d) Please refer to [EPEA's position on PVC and chlorine management](#)