

## ICONIK

Issued to:	<b>TARKETT</b>
Product specifications	ICONIK 120, 150, 200, 220T, 240, 260D, 260T, 280 T, 300, 300+, 320, 320T, 400, 450
Issue date:	October 26., 2020. Reprint November 9 <sup>th</sup> , 2022
Expiration date:	October 25., 2022, Extension February 28 <sup>th</sup> , 2023
Evaluation threshold:	At least 100 ppm of the final product
After-use scenario:	<a href="#">TARKETT ReStart® Program</a>
EPEA Registry No:	44478
MHS Version:	2.0

FUNCTION	CHEMICAL	CAS	AVERAGE CONTENT	EPEA RATING	COMMENT	GS-LT GS-BM	REACH
Polymer	PVC*	9002-86-2	35.6%		Transitional use of PVC is tolerated in durable applications designed with good materials and a collection and recycling program in place <sup>(6)</sup> . 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. <b>Check Tarkett national websites for Restart program availability.</b>	LT-P1	✓
	Polymerization additives*	Proprietary 3	1.9%			N.I.	✓
Filler	Calcium carbonate*	13397-25-6	32.2%		Fillers consist of pulverized calcium carbonate of virgin and recycled origin and aluminium hydroxide of the former PVC use. Low levels of quartz. No concern in the finished product.	LT-UNK	✓
	Crystalline silica - Quartz type	14808-60-7				LT-1	✓
	Aluminium hydroxide*	1333-84-2				BM2	✓
Plasticizer	1,2-Cyclohexanedicarboxylic acid, 1,2-diisononyl ester (DINCH)*	166412-78-8	20.5%		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	✓
	Dibutyl terephthalate (DBT)*	1962-75-0				None	✓
	Bis(2-ethylhexyl)adipate (DOA)*	123-79-5				LT-P1	✓
	Terephthalic acid, butyl methyl ester (MBT)	52392-55-9				N.I.	✓
	1,2-Cyclohexanedicarboxylic acid, 1-isononyl 2-methyl ester (MINCH)	-				N.I.	✓
	Proprietary	Proprietary 2				LT-P1	✓
Carrier	Polyethyleneterephthalate	25038-59-9	3.7%		The length of glass fibres exceeds 10 µm. No contribution of the formaldehyde-based binder to formaldehyde emissions of the flooring product. No concern seen.	LT-UNK	✓
	Glass fibres	65997-17-3				LT-UNK	✓
	Co-polyester	Proprietary 3				N.I.	✓
	Polyvinyl alcohol	9002-89-5				LT-UNK	✓
	Urea formaldehyde resin	9011-05-6				LT-P1	✓
	Proprietary	Proprietary 2				LT-UNK	✓
	Carboxylic acids, unsaturated, modified	Proprietary 3				N.I.	✓
	Polyol crosslinker	Proprietary 3				N.I.	✓
	Fibre spinning oil	Proprietary 3				N.I.	✓

FUNCTION	CHEMICAL	CAS	AVERAGE CONTENT	EPEA RATING	COMMENT	GS-LT GS-BM	REACH
Stabilizer blend	Triisodecyl phosphite	25448-25-3	0.6%		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. Conditions for restrictions of the volatile 2-(2-n-Butoxyethoxy)ethanol and phenol defined in EU legislation don't apply in this application. In effect they aren't detected in VOC tests.	LT-P1	✓
	Soybean oil, epoxidized	8013-07-8				LT-P1	✓
	2-(2-n-Butoxyethoxy)ethanol	112-34-5				LT-P1	✓
	Distillates (petroleum), hydrotreated light	64742-47-8				LT-UNK	✓
	Neodecanoic acid, zinc salt	27253-29-8				LT-P1	✓
	Phenol	108-95-2				LT-P1	✓
	Butylated hydroxytoluene	128-37-0				BM1	✓
	Alcohols, C11-14-iso-, C13-rich	68526-86-3				LT-P1	✓
	Zinc dibenzoate	553-72-0				LT-P1	✓
	Zinc 2-ethylcaproate	136-53-8				LT-P1	✓
Inks Pigments	Titanium Dioxide*	13463-67-7	0.3%		Potential health issue related to dust inhalation during mining/production of titanium dioxide. No concern in the finished product, also when considering the labelling as H351 (suspected of causing cancer - category 2) that will enter into force in the EU in September 2021. Other pigments involved each and in total well below 100 ppm. Thiourea and ethanol, present in the product at levels around 100 ppm, are object of restrictions in the EU (annex XVII) that don't apply in this application. An exposure to thiourea isn't expectable because of its absence of volatility and ethanol is likely absent in effect in the product's composition.	LT-1	✓
	Other pigments	Proprietary 1					
	Ethanol	64-17-5				BM2	✓
	Thiourea	62-56-6				LT-1	✓
	Proprietary	Proprietary 2				N.I.	✓
Additives, formulation auxiliaries and synthesis impurities	Silicon dioxide	69012-64-2	4.8%		Additives and formulation auxiliaries that have a function in the product or had a function to produce raw materials. Azodicarbonamide has mutagenic potential and is classified as substance of very high concern (SVHC) in the EU for its strong sensitization potential. It decomposes, however, to toxicologically benign air components during the application. It is mentioned in this context but not counted in the content figure, since it is absent as such in ICONIK products.	LT-1	✓
	Water*	7732-18-5				BM4	✓
	Filler formulation auxiliaries	Proprietary 3				N.I.	-
	Azodicarbonamide*	123-77-3				LT-UNK	✓
	Zinc oxide	1314-13-2				BM1	✓
	Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	25322-68-3				LT-UNK	✓
	Fatty acids, C16-18	67701-03-5				LT-UNK	✓
	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				LT-UNK	✓
Coating	Polyurethane	Proprietary 3	0.5%		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 raw 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	✓
	(2-methoxymethylethoxy) propanol	34590-94-8				LT-UNK	✓
	Melamine formaldehyde resin	13236-84-5				N.I.	✓
	Urea formaldehyde resin	9011-05-6				LT-P1	✓
	1,6-Hexandioldiacrylate	13048-33-4				LT-P1	✓
	Triethylamine	121-44-8				LT-UNK	✓
	1-Propanone, 2-hydroxy-2-methyl-1-[4-(1-methylethenyl) phenyl]-, homopolymer	163702-01-0				None	✓
	Modified acrylic copolymer	Proprietary 3				N.I.	✓
	Proprietary	Proprietary 2				LT-P1	✓
						N.I.	✓
						BM1	✓
						LT-UNK	✓

THEREOF:			
<b>Content sourced from abundant minerals</b>		32%	Calcium carbonate and dolomite used as predominant filler are obtained from abundant mineral resources.
<b>Recycled content</b>	- Internal post-industrial source (Reprocessed own production output)	2.2%	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	-	
<b>Biologically renewable content</b>	- 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.

  
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 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 or 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<sup>(b)</sup>

- 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<sup>(b)</sup>

- BM1**: Avoid: Chemical of High Concern
- BM2**: Use but search for Safer Substitutes
- BM3**: Use but still opportunity for improvement
- BM4**: Prefer: Safer Chemical
- 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](#))