

MHS

Material Health Statement

Material Health Statement

MHS står för "Material Health Statement" och är ett dokument framtaget för att transparent redovisa ett materials hälsoprofil, tredjepartsverifierat av EPEA (Agency for Environmental Protection Encouragement Agency). Denna materialutvärderingsdeklaration är ett frivilligt initiativ från Tarkett som bygger på resultaten från Cradle to Cradle's utvärderingsprocess för en produkts kemiska innehåll.

I första stege sker en inventering av de råvaror som används i våra produkter ner till 0,01 viktprocent. Detta steg görs av EPEA i nära samarbete med Tarketts leverantörer. Därefter görs en risk-klassificering med hjälp av REACH- och CLP-reglering samt Green Screen List Translator (GS-LT, som är en amerikansk klassificering av kemikalier), tillsammans med mer än 100 kemiska risk-listor och vetenskapliga källor till toxikologisk information för respektive ämne.

Efter att material har utvärderats, inklusive risk i den avsedda användningen (specifikt golv), ges de en färgkodad rekommendation:

- **Mörkgrön: "No concern"** (Ingen risk)
- **Ljusgrön: "Moderate concern"** (Låg risk)
- **Röd: "High concern, task for material optimization"** (Hög risk. Uppgift för materialoptimering.)
- **Grå: "Unknown concern, task for knowledge development"** Okänd risk. Uppgift för kunskapsutveckling.)

Obs: Samtliga ingredienser som används av Tarkett överensstämmer med REACH-förordningen. EPEA:s rekommendationer kring materialoptimering handlar om att proaktivt minska hälso- eller miljöpåverkan långt utöver minimikraven för REACH, där ju deklareringsplikten är begränsad till 0,1 % av SVHC och kandidatämnen (bilagorna XIV och XVII) i REACH-förordningen.

ID Revolution

Issued to: Tarkett
 Issue date: 01.07.2018
 Expiration date: 30.06.2020
 Evaluation threshold: At least 100 ppm of the final product
 After-use scenario: [Tarkett ReStart® program](#)
 EPEA Registry No: 39931.1

MHS Version: 2.0



Function	Component	CAS	Content	Rating	Comment	GS-LT GS-BM	REACH
Filler	Calcium carbonate	1317-65-3	< 50%			LT-UNK	✓
Polymers	Polyvinyl butyral	27360-07-2	< 40%		Polymers contributing to the build-up of the different layers, partially with a prehistory of use in former applications	LT-UNK	✓
	Polylactic acid	9051-89-2				N.I.	✓
	Additional polymers with minor contributions	Proprietary 2				N.I.	✓
Plasticizers	2-Ethylhexanoic acid diester with triethylene glycol	94-28-0	< 10%		Plasticizers and additives with an annex role as plasticizers have for a part an agricultural origin and for another part a prehistory of use in former applications	LT-UNK	✓
	Glycerides, castor-oil mono-, hydrogenated, acetates	736150-63-3				N.I.	✓
	Soybean oil, epoxidized	8013-07-8				LT-UNK	✓
Flame retardant	Resorcinol bisdiphenylphosphate	125997-21-9	< 5%		Synergistic system of flame retardants. The high purity of the chosen source and the demonstrated absence of phenol off-gassing make the phosphoric acid ester tolerable	BM2	✓
	Aluminium hydroxide	21645-51-2				BM2	✓
Reinforcement	Glass veil	Proprietary 2	< 0,3%		Glass fibres with a diameter > 10µm	LT-UNK	✓
Pigments	Proprietary	Proprietary 2	< 0,3%		Used mineral and non-halogenated organic pigments are supported despite the recent SVHC classification.	LT-1	✓
						LT-UNK	✓
Top coating chemicals	1,6-Hexandioldiacrylate	13048-33-4	< 1%		Polyester-urethane acrylate with well-defined composition. When occurring, abrasion products of the top coat are dissipated in the environment.	LT-P1	✓
	Hexane, 1,6-diisocyanato-, homopolymer, 2-hydroxyethyl acrylate- and propylene glycol monoacrylate-blocked	1392411-89-0				N.I.	✓
	Proprietary	Proprietary 2				N.I.	✓
	Synthetic amorphous silica	112945-52-5				LT-UNK	✓
	Urea, polymer with formaldehyde	9011-05-6				LT-UNK	✓
	Aluminium oxide	1344-28-1				LT-1	✓
	Paraffin waxes (petroleum), hydrotreated	64742-51-4				LT-UNK	✓
	Urea, polymer with formaldehyde	9011-05-6				LT-UNK	✓
Polybutyleneglycol bis(4-benzoylphenoxy)acetate	515136-48-8		N.I.	✓			
Additives / Synthesis impurities	Fatty acids, C12-18 and C18-unsaturated	90990-15-1	< 2,5%		Additives or by-products of synthesis of inputs involved in the production of ID Revolution. Additives labelled with * come	N.I.	✓
	Water	7732-18-5				BM4	✓
	Talcum	14807-96-6				LT-1	✓

Function	Component	CAS	Content	Rating	Comment	GS-LT GS-BM	REACH
	Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)	6683-19-8			from product certified C2C Gold for material health based on the assessment of another organization than EPEA. No concern	LT-1	✓
	Anionic, modified acrylic copolymer	Proprietary 3				-	✓
	Triethylene Glycol-mono-2-ethylhexanoate	Unknown				N.I.	✓
	Di(ethylene glycol) bis(2-ethylhexanoate)	Unknown				N.I.	✓
	Proprietary	Proprietary 2				N.I.	✓
		Proprietary 3				N.I.	✓
		Proprietary 3*					LT-UNK
						-	-
					-	-	

Total	100%	
Content originating from abundant mineral resources	~ 50%	Product with a high content originating from chemically well-defined materials with a prehistory of use in previous applications.
Post-use recycled content	~ 25%	
Rapidly renewable content	~ 11%	

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 [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.



Michael Braungart

CEO

EPEA Internationale Umweltforschung GmbH



Alain Rivière

Senior Scientist

EPEA Internationale Umweltforschung GmbH

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*

- 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*

- 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

* GreenScreen List Translator Score and GreenScreen Benchmark Score according to Toxnot classification (<https://toxnot.com/>)

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