

ID Revolution

Issued to: TARKETT

Issue date: 22.06.2020

Expiration date: 21.06.2022

Evaluation threshold: At least 100 ppm of the final product

After-use scenario: TARKETT's ReStart® Program

EPEA Registry No: 39931.2 Certificate 4524

MHS Version: 2.0



FUNCTION	CHEMICAL	CAS	CONTENT	EPEA RATING	COMMENT	GS-LT GS-BM	REAC
Filler	Calcium carbonate	1317-65-3	< 50%			LT-UNK	✓
Polymers	Polyvinyl butyral	27360-07-2	< 40%		Polymers contributing to the build-up of	LT-UNK	✓
	Poly(lactic acid)	9051-89-2			the different layers originating partially	N.I.	✓
	Additional polymers with	D			with a prehistory of use in former	LT-P1	✓
	minor contributions	Proprietary 2			applications.	LT-UNK	✓
Plasticizers	2-Ethylhexanoic acid diester with triethylene glycol	94-28-0	< 10%		Plasticizers and additives having 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				None	~
	Soybean oil, epoxidized	8013-07-8				LT-UNK	✓
Flame retardants	Phosphoric trichloride, polymer with 1,3- benzenediol, phenyl ester	125997-21-9	< 5%		Synergistic system of flame retardants. The high purity of the chosen source and the demonstrated absence of phenol offgassing make the phosphoric acid ester tolerable.	BM2	✓
	Aluminiumhydroxide	21645-51-2				BM2	✓
Reinforcement	Glass filament	Proprietary 2	< 0.3%		No concern in the application.	LT-UNK	✓
Pigments	Titanium Dioxide	13463-67-7	< 0.3%		Used mineral and non-halogenated organic pigments are supported despite	LT-1	✓
	Proprietary pigments	Proprietary 2			the recently proposed - and not yet effective - labelling of titanium dioxide as	LT-UNK	✓
					H350i (May cause cancer by inhalation), because this effect is seen as non-specific	BM1	✓
					but depending on exposure to fine dust. No concern for the finished product.	LT-UNK	✓
Top coating chemicals	1,6-Hexandioldiacrylat (HDDA)	13048-33-4	< 1%		Polyester-urethane acrylate with well-defined composition. Sensitizing monomers lose this property via their polymerization during coating curing. If occurring, abrasion products of the top coat are dissipated in the environment. The investigation of their biodegradation potential is planned.	LT-P1	✓
	Urea, polymer with formaldehyde	9011-05-6				LT-P1	~
	Hexane, 1,6-diisocyanato-, homopolymer, 2- hydroxyethyl acrylate- and propylene glycol monoacrylate-blocked	1392411-89-0				None	✓
	Polybutyleneglycol bis(4- benzoylphenoxy)acetate	515136-48-8				None	✓
	Paraffin waxes (petroleum), hydrotreated	64742-51-4				LT-UNK	✓
	Aluminium oxide	1344-28-1				BM1	✓
	2-hydroxy-2- methylpropiophenone	7473-98-5				LT-UNK	✓
	Silicon dioxide	15468-32-3				LT-1	✓
	Drangiatany	Dronviete 2				N.I.	✓
	Proprietary	Proprietary 2				LT-UNK	✓

FUNCTION	CHEMICAL	CAS	CONTENT	EPEA RATING	COMMENT	GS-LT GS-BM	REACH
	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 from a product certified C2C Gold for material health based on the assessment of another organization than EPEA. No concern.	N.I.	✓
	Water	7732-18-5				BM4	✓
	Talcum	14807-96-6				BM1	✓
Additives / Synthesis impurities	Pentaerythritol tetrakis(3- (3,5-di-tert-butyl-4- hydroxyphenyl)propionate)	6683-19-8				LT-UNK	✓
	Anionic, modified acrylic copolymer	Proprietary 3				LT-UNK	✓
	Triethylene Glycol-mono-2- ethylhexanoate	Unknown				N.I.	✓
	Di(ethylene glycol) bis(2- ethylhexanoate)	Unknown				LT-P1	✓
	Proprietary	Proprietary 2				N.I.	✓
						LT-UNK	✓
		Proprietary 3				N.I.	✓
		Proprietary 3*				N.I.	-

Thereof			
Content sourced from abundant minerals		50%	Filler and aluminium-based mineral components
Recycled content	Internal post-industrial source	-	Chamically well defined source outernal to Taylottic production involved for
	Post-installation / pre-use source	-	Chemically well-defined source external to Tarkett's production involved for building up the recycled content.
	Post-use source	20 - 25%	building up the recycled content.
Biologically renewable	Animal	-	Different additives have a plant oil origin and the raw material base of
content	Vegetal	10 - 15%	poly(lactic acid) is starch.

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 (more information in the "MHS development Guidance V2.0", link in the legend below). 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 MöslePartner & Managing Director

Dr. Alain Rivière Scientific Supervisor



Legend:

PEPEA 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

 $\begin{tabular}{ll} SVHC: Substance of Very High Concern. Candidate for listing in Annex XIV (Authorization list) of REACH Regulation at a concentration above 0.1% \end{tabular}$

-: 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)