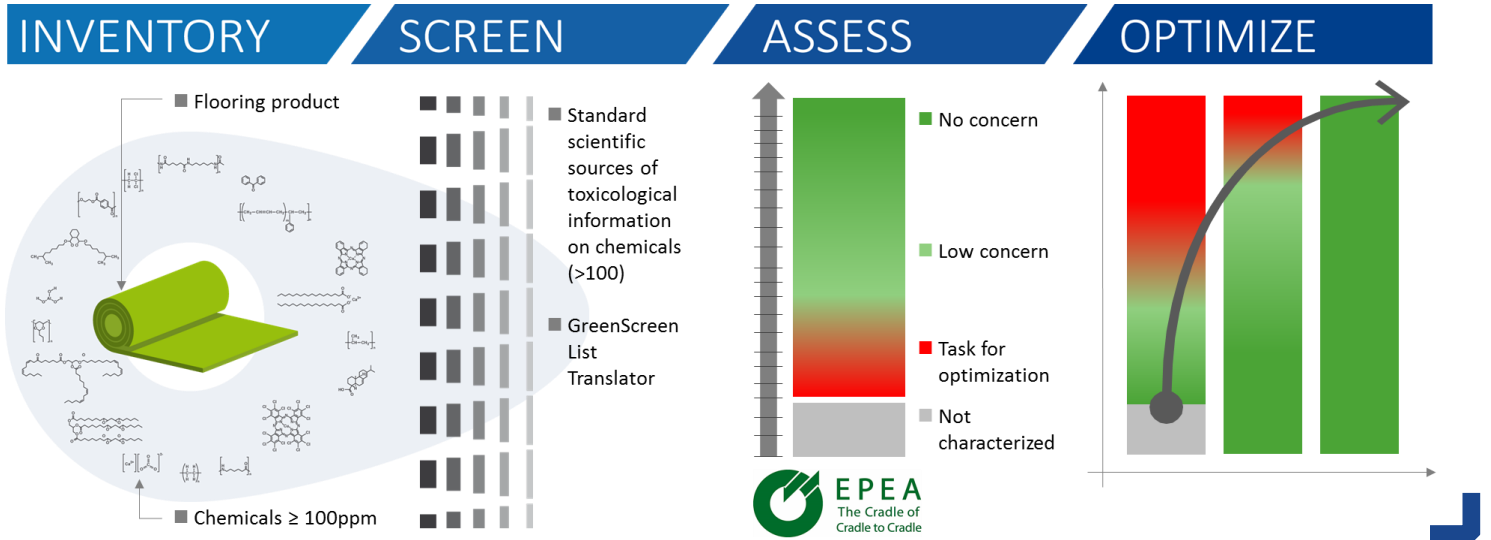


Tarkett's Path to Positive Optimization Strategy

It is estimated that we spend approximately 90% of our time indoors, therefore, it is important to consider the building materials with which we surround ourselves. Tarkett's goal is to design products that will enhance the human experience and allow us to live and work in spaces that promote health and well-being. Transparency and material reporting is essentially the first step but in order to make real and significant changes, we need to go a step further and not only inventory, screen and assess, but also optimize products for present and future uses.

At Tarkett, the optimization of our product compositions is at the core to our "Closed Loop, Circular Design" strategy powered by Cradle to Cradle® principles and the Circular Economy.

Tarkett's goal is to design our products today to be our raw materials of tomorrow, applying the first Cradle to Cradle® principle (Waste = Food), to select healthy and safe materials that can be perpetually cycled.



The Cradle to Cradle Product Optimization process is based on the following 4 steps:

- ⊙ **Material Inventory:** In collaboration with our suppliers, we inventory the raw materials used in our products to a minimum of 1000 ppm with the goal of inventorying at 100ppm in the near future. We identify them by Chemical Abstracts Service Registry Number (CASRN).
- ⊙ **Material Screening:** Individual chemicals are screened for their hazard rating using the Green Screen List Translator (GS-LT), along with more than 100 chemical hazard lists and scientific sources of toxicological information in use at EPEA (Environmental Protection and Encouragement Agency), the European Cradle to Cradle scientific research Institute based in Germany. For more information, please visit EPEA website (<http://www.epea.com>).
- ⊙ **Material Assessment:** The product and its materials are assessed according to the Cradle to Cradle® principles and considering both the intrinsic hazard/safety properties of chemicals and occupant exposure. The product's environmental and health quality is assessed on the basis of a target scenario where materials involved in sourcing, production, use and post-use handling serve as technical nutrients for future production or interact beneficially with exposed organisms and ecosystems as biological nutrients. The assessment is conducted by EPEA.
- ⊙ **Optimization:** Products are reformulated using Cradle to Cradle® principles, by selecting materials that are safe, healthy and beneficial for humans and the environment and that can be perpetually cycled.

Thank you for considering our products and for your commitment to improving the built environment.

Diane Martel
Vice President of Environmental Planning and Strategy

Feliks Bezati, Ph.D.
Director of Product Stewardship

Material Health Statement (MHS)

Homogeneous Vinyl Flooring

ISSUED TO	Tarkett
PRODUCTS COVERED	iQ Optima®, iQ Granit®, iQ Natural®
VALID UNTIL	30 September 2018
INVENTORY THRESHOLD	1000 ppm (0.1%) of the product
THIRD-PARTY VERIFICATION	GreenCircle Certified, LLC
ASSESSMENT BODY	EPEA International
EPEA REGISTRY No	MHS 39581-1



MATERIAL FUNCTION	CHEMICAL	CASRN	% IN PRODUCT	GS-LT	EPEA RATING	COMMENT ON EPEA RATING
Polymer	PVC	9002-86-2	40-80	LTUNK	C	Transitional use of PVC is tolerated in durable applications designed with safe materials and a collection and recycling program in place. iQ products use plasticizers and stabilizers that belong to the best available and VCM content is below 1ppm. Tarkett provides an after use take back guarantee within the ReStart reclaiming program. For more information on PVC assessment by EPEA, please visit EPEA position on PVC .
	Pre-additives	Various	<0.1		Grey	Pre-additives unknown, assessment on-going.
Filler	Mineral fillers	Various	20-40	LTUNK	C	Natural minerals containing variable levels of quartz and monitored levels of heavy metals. Potential health issue related to inhalation of quartz containing dust during mining/production. No concern in the finished product.
	Impurities	14808-60-7	<0.1	BM1 ¹		
Plasticizer	1,2-Cyclohexanedicarboxylic acid, diisononylester	166412-78-8	0-20	BM3	C	Alternative to phthalate plasticizers approved for applications with food contact with high migration limit reflecting a much better safety profile.
	Acetic ester of monoglycerides	736150-63-3	0-20	UNK	B	Plasticizer approved for applications with food contact without restrictions. Digestible, metabolizing like the vegetable oils it originates from.
Heat Stabilizers	Epoxidized soy bean oil	8013-07-8	0-5	LTUNK	B	Acts as plasticizer and scavenger of hydrochloric acid that may be formed during the flooring use. Acts in synergy with Ca-Zn soaps.
	Ca-Zn soaps	Proprietary	<2	LTUNK	C	Best performing heat stabilizer combination.
Pigments	Titanium dioxide	13463-67-7	<1	BM1 ²	C	Potential health issue related to dust inhalation during mining/production. No concern in finished product.
	Carbon black	1333-86-4		BM1 ³	C	
	Various pigments used depending on color	Various	<1	LTUNK	B	Mineral pigment based on elements Al, Si. No cause for concern.
				BM3 LTUNK	X	Potential health issues associated with chlorinated or copper containing pigments if the product is incinerated.
Processing aid	Polymethacrylate copolymer resin	Proprietary	<1	LTP1 ⁴	C	Low concern.
Coating	Polyurethane acrylate coating	Proprietary	<1	LT1 ⁵ LTUNK	X	Surface reinforcement based on polyurethane acrylate chemistry. UV cured with a photo-initiator that is associated with health issues.

Hazard: ¹ High-Carcinogen, ² High-Carcinogen, ³ High-Carcinogen, ⁴ Very High-Acute Mammalian Toxicant, ⁵ High-Carcinogen

EPEA's rating, based on Cradle to Cradle® material assessment, is made in relation to a quality target and post-use scenario and is specific to supply chain materials used for Tarkett products, see previous page

A or B	Chemical component leads to no concern in the material flow scenario for the product
C	Chemical component is of low concern in the material flow scenario for the product
X	Chemical component is a task for optimization
Grey	Chemical component is not characterized enough to be classified.

GS-LT: GreenScreen List Translator is related to the intrinsic CASRN properties, independent from the product use

LT1	Chemical is found on an authoritative list of the most-toxic chemicals	UNK	Unknown (no data on List Translator Lists)
LTP1	Chemical may be a serious hazard, but the confidence level is lower	BM1	Chemical to be avoided because it's known to be of high concern
LTUNK	Chemical's hazard level is unspecified. Not enough information is available	BM2	Chemical for which manufacturers should seek safer substitutes
		BM3	Chemical that has some hazards associated with it
		BM4	Chemical that's preferred because it's not suspected of being hazardous
		BMU	Chemical with insufficient data to benchmark



THE ULTIMATE FLOORING EXPERIENCE

LEED v4 – Score Card

Homogeneous Vinyl Flooring

PRODUCTS COVERED iQ Optima®, iQ Granit®, iQ Natural®,

MATERIAL & RESOURCES

MRc2. Building product disclosure and optimization – Environmental Product Declarations

- Option 1: Environmental Product Declaration (EPD) – 1 point
- Product-specific EPD Industry-wide (generic) EPD Product-specific declaration
- Option 2: Multi-attribute Optimization – 1 point
- 3rd party certified products that demonstrate impact reduction below industry average

MRc3. Building product disclosure and optimization – Sourcing of Raw Materials

- Option 1: Raw Material Source and Extraction Reporting – 1 point
- U.N. Global Compact GRI Sustainability Report ISO 26000 OECD
- Option 2: Leadership Extraction Practices – 1 point

Bio-based materials	Pre-Consumer	Post-Consumer	Manufacturing Location	Extended Producer Responsibility
-	25%	-	Sweden	Yes (ReStart® program)

MRc4. Building product disclosure and optimization – Material Ingredients

- Option 1: Material Ingredient Disclosure – 1 point
- Manufacturer Inventory Cradle to Cradle Certification Declare HPD
- Option 2: Material Ingredient Optimization – 1 point
- Cradle to Cradle Certification GreenScreen Benchmark REACH Other

MRc5. Construction and demolition waste management

- Reclamation and recycling program proposed – Tarkett's ReStart® program

INDOOR ENVIRONMENTAL QUALITY

EQc1. Enhanced Indoor Air Quality strategies

- Enhanced IEQ Strategies – Abrasive Action entry walk-off systems – 1 point

EQc2. Low-emitting materials

- Certification compliant with California Department of Public Health (CDPH) – FloorScore®
- TVOC emissions 0.5 mg/m³ or less Between 0.5 and 5.0 mg/m³ 5.0 mg/m³ or more

For more information please visit www.tarkettna.com/mhs or contact us mhs@tarkett.com