

Stratasys Compliance and Sustainability Playbook



DIGI Dress by **Karim Rashid** in collaboration with STRATASYS

Stratasys focus on the shift to Mindful Manufacturing™

Stratasys has a sharp focus on the shift towards Mindful Manufacturing, which is revolutionizing traditional processes and supply chains. Our approach to manufacturing is driven by a deep sense of responsibility to the environment and future generations. With the help of 3D printing technology, we are redesigning parts and supply chains with great thought and intention to maximize sustainability while still supporting business growth. We remain dedicated to delivering industry-specific innovation that ensures a positive impact on the environment, and we are proud to play our part in creating a better world for future generations.

VeroEco™ Flex Materials for direct to textile 3D printing

The materials used in direct to textile 3D printing have become a topic of increasing importance amidst concerns about sustainability. In this regard, Stratasys VeroEco Flex family of materials have made significant strides. They have been rigorously tested to meet industry standards for sustainability in line with RSL restricted substances lists for finished goods. This includes scrutinizing the chemical restrictions for all materials. The VeroEco materials are compatible with the cutting-edge J850™ TechStyle™ printer, which is powered by 3DFashion™ technology for direct to textile 3D printing. These developments reflect our commitment to impacting the fashion supply chain by cutting down the carbon footprint with the establishment of on-demand additive manufacturing solutions.

CERTIFICATIONS - Washability, Durability, Sustainability

Washability Testing



ISO 105-C06



ISO 105-C06

Color fastness to rubbing testing



Dry 150 rubs

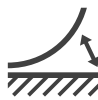


Alkali persp.
50 rubs



Acid persp.
50 rubs

Adhesion strength testing



Washability Testing

Color fastness for light exposure



ISO 105-B06



Rubbing Abrasion Test

RSL approved



RSL

Sustainability



As the world of 3D printing continues to grow and evolve, it is essential that we prioritize ethical and sustainable practices. At Stratasys, we recognize the crucial role that chemistry plays in every material that we use. That is why we make it our responsibility to carefully select the chemicals that meet industry standards and align with our values. We are committed to reducing our overall chemical footprint and creating a world that is both innovative and sustainable. Our dedication to this mission is what drives us to continue pushing the boundaries of what is possible in the world of 3D printing.

VeroEco Flex materials are in compliance with testing according to RSL requirements:

Test	Requirement (mg/kg)	Results (mg/kg)	Pass/Fail
[†] Azo dyestuffs (Arylamines) (BS EN ISO 14362-1:2017)	<30 (Detection limit: 20)	None detected (<20)	Pass
4-chloro-o-toluidinium chloride 2-Naphthylammoniumacetate 4-methoxy-m-phenylene diammonium sulphate; 2, 4-diaminoanisole sulphate 2, 4, 5-trimethylaniline hydrochloride (BS EN ISO 14362-1:2017) (modified)	<30 (Detection limit: 30)	None detected (<30)	Pass
[†] Chlorinated phenols PCP, TCP & TeCP (BS EN ISO 17070:2015)	<1.0 each (Detection limit: 0.05)	None detected (<0.05)	Pass
NPEO, NP, OPEO and OP (BS EN ISO 18218-2:2019)	<100 (each and as a sum) (Detection limit: 10)	None detected (<10)	Pass
[†] Disperse Dyes (DIN 54231:2005-11)	Not detectable (Detection limit: <50 for Direct Blue 15, Direct Blue 218, and Disperse Violet 93:1. Detection limit for all others: <15)	None detected	Pass
Organotin compounds ([†] PD CEN ISO/TS 16179:2012 and BS EN ISO 22744-1:2020)	TBT, TPhT: <0.5 each All others: <1.0 each (Detection limit: 0.05)	MBT: 0.07 All others: (<0.05)	Pass
[†] PFOS/PFOA (IHM 001)	<0.025 (Detection limit: 0.025)	None detected (<0.025)	Pass
[†] Phthalates (CPSC-CH-C1001-09.4 and BS EN ISO 14389:2014)	<500 each <1000 sum (Detection limit: 100)	None detected (<100)	Pass
[†] PAH (AfPS GS 2019:01 PAK)	<1.0 each <10 sum (Detection limit 0.2)	None detected (<0.2)	Pass
[†] SOCP (C10-C13) (IHM 042 (GC-ECD))	<1000 (Detection limit: 100)	None detected (<100)	Pass

VeroEco Flex materials are free of heavy metals according to RSL requirements:

Total Heavy Metals Screening - Total Digest (mg/kg) ([†] CPSC CH E1001-08.3 and [†] E1002-08.3 Microwave digest/ICP-MS, [†] BS EN 16711-1:2015) (Detection limit 0.1 mg/kg)				
Requirement (mg/kg)	<100	<40	<100	<0.5
	Lead	Cadmium	Arsenic	Mercury
	<0.1	<0.1	<0.1	<0.1
	Pass			



Shot by Gant Goldstein in collaboration with STRATASYS

