BioEdge Standard Recipe by BioPlastic Solutions

Health Product Declaration v2.1.1

created via: HPDC Online Builder

CLASSIFICATION: 06 65 00

PRODUCT DESCRIPTION: BioEdge® Edgebanding is both a process and a product solution eliminating the use of oil and harmful chemicals, no longer needed to manufacture edgebanding. It's a complete bio-based replacement for PVC and ABS edgeband. BioEdge® Edgebanding is formulated from BioBest®, a patented proprietary plastic material made from sugar cane. BioPlastic Solutions' products using BioBest™ bio resin are produced with 86%+ or greater of a proprietary biobased resin blend, quickly making it the leading "green" solution in the industry and number one choice with our partners.



Section 1: Summary

Nested Method / Product Threshold

	ITFN			

Inventory	Reporting	Forma
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- Nested Materials Method
- C Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

- C 100 ppm
- ① 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS C Other

Residuals/Impurities

Residuals/Impurities Considered in 0 of 4 Materials

Explanation(s) provided for Residuals/Impurities? • Yes • No

All Substances Above the Threshold Indicated Are:

 ○ Yes Ex/SC Yes No Characterized

% weight and role provided for all substances.

O Yes Ex/SC O Yes O No Screened

All substances screened using Priority Hazard Lists with results disclosed.

Identified O Yes Ex/SC O Yes O No

One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

PLA [UNDISCLOSED NoGS] UNDISCLOSED [UNDISCLOSED LT-UNK] UNDISCLOSED [UNDISCLOSED NoGS] PLA COLORANT [UNDISCLOSED NoGS

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-UNK

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Testing completed for recipe breakdown on multiple occasions with each new iteration or change of the recipe.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: NA Biobased content: NA

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

C Yes No

PREPARER: Self-Prepared

VERIFIER: VERIFICATION #: SCREENING DATE: 2018-06-25 PUBLISHED DATE: 2020-01-07

EXPIRY DATE: 2021-06-25



Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

PLA %: 82.00 - 88.00

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities as machine only runs this product with this material.

OTHER MATERIAL NOTES: NA

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREEN	HAZARD SCREENING DATE: 2018-06-25			
%: 100.00 - 100.00	GS: NoGS	RC: None	nano: No	ROLE: Base Material		
HAZARD TYPE AGENCY AND LIST TITLES		WARNINGS				
None found		No warnings for	ound on HPD Priority Hazard Lists			

SUBSTANCE NOTES: PLA resin as the base material for edge banding from sustainble sourced sugar cane.

UNDISCLOSED

%: 6.00 - 8.00

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: NO

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities. Machine runs solely this product with these materials.

OTHER MATERIAL NOTES: NA

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2018-06-25		
%: 100.00	GS: LT-UNK	RC: None	nano: No	ROLE: Flexibility of final product
HAZARD TYPE	AGENCY AND LIST TITLES	WARNIN	GS	
None found No warnings found on HPD Priority Hazard List				

SUBSTANCE NOTES: Caprolactone base material sourced from pine needles

UNDISCLOSED %: 5.00 - 6.00

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: NO

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities. Machine runs solely this product with these materials.

OTHER MATERIAL NOTES: CN-L03 is a permitted component of such materials pursuant to section 201(s) of the Federal, Drug, and Cosmetic Act and Parts 182, 184, and 186 of the Food Additive Regulations.

UNDISCLOSED

HAZARD SCREENING METHOD	HAZARD SCREENING DATE: 2018-06-25			
%: 100.00	GS: NoGS	RC: None	nano: No	ROLE: Improves PLA Clarity
HAZARD TYPE	AGENCY AND LIST TITLES	WARNIN	GS	
None found		No warnin	gs found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: Impro	oves clarity of finished product.			

PLA COLORANT %: 2.00 - 6.00

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: NO

RESIDUALS AND IMPURITIES NOTES: No impurities or notes as machine only runs this material.

OTHER MATERIAL NOTES: NA

UNDISCLOSED

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREEN	HAZARD SCREENING DATE: 2018-06-25		
%: 100.00	gs: NoGS	RC: None	nano: No	ROLE: Pigment	
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS			
None found		No warnings found on HPD Priority Hazard Lists			

SUBSTANCE NOTES: Pigment for coloring of edge banding to standard color set or to match any color requested. Colorant carrier is same PLA resin as base material.



Section 3: Certifications and Compliance

CERTIFICATION AND COMPLIANCE NOTES: BioEdge contains 84%-94% bio based PLA

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS	NA		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: NA CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE: 2018- 06-25	EXPIRY DATE:	CERTIFIER OR LAB: NA
BIOBASED CONTENT	NA		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: NA	ISSUE DATE: 2018- 06-25	EXPIRY DATE:	CERTIFIER OR LAB: NA

CERTIFICATE URL:

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.



Section 5: General Notes

BioEdge(R) standard recipe edgebanding can be adjusted for change gloss/finish or add to add any needed characteristics (UV rating, anti-microbial, etc.)

MANUFACTURER INFORMATION

MANUFACTURER: BioPlastic Solutions

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KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity **END** Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

MAM Mammalian/systemic/organ toxicity

MUL Multiple hazards

NEU Neurotoxicity

OZO Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)
REP Reproductive toxicity

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

LAN Land Toxicity

NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)

BM-3 Benchmark 3 (use but still opportunity for improvement)

BM-2 Benchmark 2 (use but search for safer substitutes)

BM-1 Benchmark 1 (avoid - chemical of high concern)

BM-U Benchmark Unspecified (insuficient data to benchmark)

Recycled Types

PreC Preconsumer (Post-Industrial)

PostC Postconsumer

Both Both Preconsumer and Postconsumer

Unk Inclusion of recycled content is unknown

None Does not include recycled content

LT-P1 List Translator Possible Benchmark 1 LT-1 List Translator Likely Benchmark 1

LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

NoGS Unknown (no data on List Translator Lists)

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material Nested Method / Product Threshold Substances listed within each material per threshold indicated per product Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology

Third Party Verified Verification by independent certifier approved by HPDC

Preparer Third party preparer, if not self-prepared by manufacturer

Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances
 created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.