ARAUCO NA MDF - Vesta NAF, MR50 NAF by Arauco North America

CLASSIFICATION: 06 00 00 Wood, Plastics, and Composites

PRODUCT DESCRIPTION: VESTA NAF panels are produced using no added formaldehyde resin and 100% recycled and/or recovered wood fiber, and are ECC[™] (Eco-Certified Composite) sustainably certified products. These panels meet or exceed the requirements for ANSI MR10. Our highest grade of moisture resistance is available in VESTA MR50 NAF. These panels meet or exceed the requirements for ANSI MR50, making them ideal products for high moisture areas.

Section 1: Summary

CONTENT INVENTORY

Inventory Reporting Format

- C Nested Materials Method
- Basic Method

Threshold Disclosed Per

C Material

Product

Threshold level
🖸 100 ppm
C 1,000 ppm
C Per GHS SDS
C Per OSHA MSDS
C Other

Residuals/Impurities	
Considered	

PartiallyConsideredNot Considered

Explanation(s) provided for Residuals/Impurities?

Basic Method / Product Threshold

Are All Substances Above the Thres	hold Indicated:
Characterized Percent Weight and Role Provided?	🖸 Yes 🔿 No
Screened Using Priority Hazard Lists with Results Disclosed?	Yes O No
Identified Name and Identifier Provided?	🖸 Yes 🖸 No

INVENTORY AND SCREENING NOTES:

This HPD includes the following substrates: Trupan Vesta NAF, Trupan Vesta MR50. Ingredient names undisclosed on HPD are considered proprietary.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

Formaldehyde emissions: CARB NAF Executive Order N-16-185 Vesta - Eugene, OR

Composite Wood: ECC - Eco-certified Composite Grademark Program - Eugene, OR

Management: ISO 14001 – Environmental Management System and OHSAS 18001 – Safety Management System

Other: Forest Stewardship Council® - FSC Chain of Custody and Controlled Wood

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

SCREENING DATE: 2017-08-18 PUBLISHED DATE: 2018-01-29 EXPIRY DATE: 2020-08-18

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.

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

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY GREENSCREEN SCORE | HAZARD TYPE

ARAUCO NA MDF - VESTA NAF, MR50 NAF [CELLULOSE, MICROCRYSTALLINE NoGS POLYMERIC MDI (PMDI) LT-UNK | RES | MUL | CAN METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) LT-UNK | MAM | EYE | SKI | CAN | RES | MUL SLACK WAX (PETROLEUM) LT-1 | CAN | MUL DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI) LT-UNK | MAM | EYE | SKI | CAN | RES | MUL UNDISCLOSED CHEMICAL #1 BM-4 UNDISCLOSED CHEMICAL #2 LT-UNK UNDISCLOSED CHEMICAL #3 LT-P1 | MUL UNDISCLOSED CHEMICAL #4 LT-UNK]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

• Yes

O No

Third Party Verified?

Health Product Declaration v2.1

created via: HPDC Online Builder

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, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

ARAUCO NA MDF - VESTA NAF, MR50 NAF

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PRODUCT THRESHOLD: 100 ppm
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RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: ARAUCO NA worked with an HPD Third Party Preparer to confirm that all residual and impurities have been considered during the preparation of this HPD.

OTHER PRODUCT NOTES:

CELLULOSE, MICROCRYSTALLINE					ID: 9004-34-6
%: 92.0000 - 96.0000	GS: NoGS	RC: None	NANO: NO	ROLE: Structural Component	
HAZARDS:	AGENCY(IES) WITH WA	ARNINGS:			
None Found	No warnings four	nd on HPD Priority lists			

SUBSTANCE NOTES:

6: 1.5000 - 6.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Resin
HAZARDS:	AGENCY(IES) WITH WARNING	S:		
RESPIRATORY	AOEC - Asthmagens		Asthmagen (G) - generally	v accepted
RESTRICTED LIST	US EPA - PPT Chemic	al Action Plans	EPA Chemical of Concern	- Action Plan published
RESPIRATORY	ATORY US EPA - PPT Chemical Action Plans Inhalation sensitizer causing asthma and lung damage		ng asthma and lung damage	
CANCER	МАК		Carcinogen Group 4 - Nor under MAK/BAT levels	-genotoxic carcinogen with low risk
RESPIRATORY	МАК		Sensitizing Substance Sal sensitization	n - Danger of airway & skin

SUBSTANCE NOTES:

METHYLENE BISPHENYL DIISOO			ID: 101-68-8	
%: 0.7500 - 3.6000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Resin
HAZARDS:	AGENCY(IES) WITH WARNINGS:			

MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	МАК	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	МАК	Sensitizing Substance Sah - Danger of airway & skin

SUBSTANCE NOTES:

SLACK WAX (PETROLEUM)

ID: 64742-61-6

%: 0.4000 - 1.0000	GS: LT-1	RC: None	NANO: No	ROLE: Water Repellent
HAZARDS:	AGENCY(IES) WITH V	NARNINGS:		
CANCER	EU - R-phrases		R45 - Ma	y cause cancer
CANCER	EU - GHS (H-St	tatements)	H350 - M	ay cause cancer
CANCER	EU - REACH Ar	EU - REACH Annex XVII CMRs		en Category 2 - Substances which should be regarded are Carcinogenic to man
MULTIPLE	ChemSec - SIN	List	CMR - Ca	arcinogen, Mutagen &/or Reproductive Toxicant
MULTIPLE	German FEA - S	Substances Hazardous to Wate	rs Class 3 -	Severe Hazard to Waters
CANCER	EU - Annex VI C	EU - Annex VI CMRs		en Category 1B - Presumed Carcinogen based on vidence
CANCER	Australia - GHS	i	H350 - M	ay cause cancer

DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI)

· · · · ·				
%: 0.1750 - 0.7800	GS: LT-UNK	RC: None	NANO: NO	ROLE: Resin
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
MAMMALIAN	EU - R-phrases	R20 - Hai	mful by Inhalation (gas o	or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irrit	ating to eyes	
SKIN IRRITATION	EU - R-phrases	R38 - Irrit	ating to skin	
CANCER	EU - R-phrases	R40 - Lim	ited Evidence of Carcino	ogenic Effects
RESPIRATORY	EU - R-phrases	R42 - Ma	y cause sensitization by	inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - Ma	y cause sensitization by	skin contact
ORGAN TOXICANT	EU - R-phrases	R48: Dan exposure	ger of serious damage to	o health by prolonged
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Che	mical of Concern - Action	n Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Ca	auses skin irritation	
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - M	ay cause an allergic skin	reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Ca	auses serious eye irritatio	on
RESPIRATORY	EU - GHS (H-Statements)		ay cause allergy or asthr s if inhaled	na symptoms or breathing
CANCER	EU - GHS (H-Statements)	H351 - Su	uspected of causing can	cer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation	sensitizer causing asth	ma and lung damage

SUBSTANCE NOTES:

UNDISCLOSED CHEMICAL #1					ID: Undisclosed
%: 0.1619 - 0.3238	GS: BM-4	RC: None	NANO: No	ROLE: Release Agent	
HAZARDS:	AGENCY(IES) WITH WAR	RNINGS:			
None Found	No warnings found	on HPD Priority lists			
SUBSTANCE NOTES: This chemica and its CAS# were not able to 2.1 Builder Tool		-	-		
UNDISCLOSED CHEMICAL #2					ID: Undisclosed
%: 0.0627 - 0.1254	GS: LT-UNK	RC: None	NANO: NO	ROLE: Release Agent	
AUCO NA MDE - Vesta NAE, MB50 N	AF				

	mical has been identified ar e to be disclosed on this HF		HPD Third Party Prep	parer. Due to its propriety natu	ire, this chemical
INDISCLOSED CHEMICAI	L #3				ID: Undisclosed
o: 0.0169 - 0.0337	GS: LT-P1	RC: None	NANO: NO	ROLE: Release Agent	
HAZARDS:	AGENCY(IES) WITH WAF	RNINGS:			
				ard to Matoro	
				parer. Due to its propriety natu	ire, this chemical
SUBSTANCE NOTES: This che	mical has been identified ar e to be disclosed on this HF	nd screened by Arauco's			Ire, this chemical
SUBSTANCE NOTES: This che and its CAS# were not abl	mical has been identified ar e to be disclosed on this HF	nd screened by Arauco's			
SUBSTANCE NOTES: This che and its CAS# were not abl	mical has been identified an e to be disclosed on this HF L #4	nd screened by Arauco's PD. RC: None	HPD Third Party Prep	parer. Due to its propriety natu	
SUBSTANCE NOTES: This cher and its CAS# were not abl	mical has been identified an e to be disclosed on this HF L #4 GS: LT-UNK	nd screened by Arauco's PD. RC: None	HPD Third Party Prep	parer. Due to its propriety natu	

Section 3: Certifications and Compliance

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.

FORMALDEHYDE EMISSIONS	CARB NAF Exec	CARB NAF Executive Order N-16-185 Vesta - Eugene, OR			
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: ARAUCO North America - Eugene, Oregon CERTIFICATE URL: https://www.arb.ca.gov/toxics/compwood/naf_ulef/n185. CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE:2016- 05-23	EXPIRY DATE: 2018- 05-23	CERTIFIER OR LAB: California Air Resources Board		
COMPOSITE WOOD	ECC - Eco-certified C	composite Grademar	k Program - Eugene, OR		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: ARAUCO North America - Eugene, Oregon	ISSUE DATE:2016-06- 07	EXPIRY DATE:	CERTIFIER OR LAB: Composite Panel Association		
ARAUCO NA MDF - Vesta NAF, MR50 NAF hpdrepository.hpd-collaborative.org		HPD v2.	1 created via HPDC Builder Page 5 of 8		

CERTIFICATE URL:

https://www.arauco.cl/na/sostenibilidad/certificaciones/

CERTIFICATION AND COMPLIANCE NOTES: Has Completed and Fulfilled the Requirements of: CPA 4-11 Eco-Certified Composites (ECC) Sustainability Standard and California Air Resources Board (CARB) Airborne Toxic Control Measure (ATCM) 93120 SCOPE OF CERTIFICATION: MDF. Eco-attributes: Carbon Footprint; Locally Sourced Fiber; Recycled, Recovered or Post-Consumer Fiber Content.

MANAGEMENT	ISO 14001 – Environmental Management System and OHSAS 18001 – Safety Management System		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Bennettsville, SC; Fort Mill, SC; Eugene, OR; Albany, OR; Malvern, AR; Sault Ste. Marie, ON; St. Stephen, NB; Moncure, NC, Biscoe, NC	ISSUE DATE:2017-12- 21	EXPIRY DATE: 2020- 12-20	CERTIFIER OR LAB: Lloyd's Register Quality Assurance
CERTIFICATE URL: https://www.arauco.cl/na/sostenibilidad/certificaciones/			

CERTIFICATION AND COMPLIANCE NOTES: Lloyd's Register Quality Assurance approved the above facilities to the ISO 14001:2004 and OHSAS 18001:2007 Management Systems. These Management Systems are applicable to the manufacturer of a diverse line of composite panel products.

OTHER	Forest Stewardship Council® - FSC Chain of Custody and Controlled Wood			
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: As a multi-site certificate, the activities and products included in the scope of this certificate are performed by a network of participating sites (all ARAUCO NA manufacturing facilities). Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on invoices and shipping documents and must be stated on the customer PO in order to receive as such. CERTIFICATE URL:	ISSUE DATE:2013-09- 23	EXPIRY DATE: 2018- 09-22	CERTIFIER OR LAB: Rainforest Alliance	

https://www.arauco.cl/na/sostenibilidad/certificaciones/

CERTIFICATION AND COMPLIANCE NOTES: Certificate Type: Multi-site Chain of Custody and Controlled Wood; Standard(s): FSC-STD-40-003 V1-0; FSC-STD-40-004 V2-1;FSC-STD-40-005 V2-1; Product group(s): MDF, MDF with laminate; Particleboard, particleboard with laminate; Valid from 23 September 2013 to 22 September 2018; Certificate Registration Code: RA-COC-000444, RA-CW-000444; FSC License Code: FSC-C019364; Certificate Issue Number: IN-2015-1

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

Ingredient percentages are expressed in terms of dry weight basis and represent average production values across multiple mills. Safety Data Sheets (SDS) in GHS format can be found at www.arauco.cl/na/. ToxServices LLC considered all residuals and impurities identified for the ingredients of this product. Models covered under HPD: Trupan Vesta NAF, Trupan Vesta MR50 Variations within group: These products are offered in a variety of thickness and panel sizes. Variations in dosing percentages for wood, resin and other additives are inherent due to optimization of recipes to achieve targeted performance properties of the panels.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Arauco North America Address: 400 Perimeter Center Terrace, Suite 750 Atlanta GA 30346, USA WEBSITE: https://www.arauco.cl/na/ CONTACT NAME: Kerry Little TITLE: Corporate Sustainability Manager PHONE: 506-465-2975 EMAIL: kerry.little@arauco-na.com

KEY

OSHA MSDSOccupational Safety and Health Administration Material Safety Data SheetGHS SDSGlobally Harmonized System of Classi cation 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

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 Unspeci ed (insu cient 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

Other Terms Inventory Methods:

ARAUCO NA MDF - Vesta NAF, MR50 NAF hpdrepository.hpd-collaborative.org

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

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) 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 produc

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.