DELTA®-ADHESIVE LVC by Dörken Systems Inc.

HPD UNIQUE IDENTIFIER: 23404

CLASSIFICATION: 07 52 13.11 Cold Adhesive Applied Atactic-Polypropylene-Modified Bituminous Membrane Roofing PRODUCT DESCRIPTION: DELTA®-ADHESIVE LVC is a lower volatile organic compound (VOC) formulation, it is a rubber-based adhesive for selfadhering membranes such as DELTA®-VENT SA. FEATURES: Quick setting Aggressive tack provides increased adhesion of membrane Suitable for application at normal and low temperatures Easily applied Compliant with OTC rules for industrial adhesives and California South Coast Rule 1168.

Section 1: Summary

CONTENT INVENTORY

Inventory Reporting Format

Nested Materials MethodBasic Method

Threshold Disclosed Per

- C Material
- O Product

Threshold level 100 ppm 1,000 ppm Per GHS SDS Other

Residuals/Impurities

ConsideredPartially ConsideredNot Considered

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

Basic Method / Product Threshold

All Substances Above the Threshold Indicated Are:

Characterized O Yes Ex/SC O Yes O No % weight and role provided for all substances.

Screened O Yes Ex/SC O Yes O No All substances screened using Priority Hazard Lists with results disclosed.

Identified © Yes Ex/SC © Yes © No All substances disclosed by Name (Specific or Generic) and Identifier.

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

DELTA-ADHESIVE LVC [METHYL ACETATE LT-UNK | PHY | EYE NAPHTHA (PETROLEUM), LIGHT STEAM-CRACKED, DEBENZENIZED, POLYMERS, HYDROGENATED LT-UNK STYRENE BUTADIENE RUBBER (SBR) LT-UNK N-HEXANE LT-1 | REP | AQU | PHY | MAM | SKI | MUL | END DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI); LT-1 | PBT | CAN | MUL PARACHLOROBENZOTRIFLUORIDE (PCBTF) LT-P1 | MUL SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC LT-1 | MAM | GEN | CAN | MUL *CYCLOHEXANE* LT-P1 | AQU | PHY | MAM | SKI | MUL *N-HEPTANE* LT-P1 | AQU | PHY | MAM | SKI | END | MUL]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): <240 Regulatory (g/l): <240 Does the product contain exempt VOCs: No Are ultra-low VOC tints available: N/A Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1 Nanomaterial ... No INVENTORY AND SCREENING NOTES:

This HPD was created with Basic Inventory.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: N/A

VOC content: OTC Model Rule for Adhesives and Sealants VOC content: SCAQMD Rule 1168 Adhesive and Sealant Applications VOC content: AVAQMD Rule 1168 Adhesive and Sealant Application

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

○ Yes○ No

DELTA-ADHESIVE LVC hpdrepository.hpd-collaborative.org PREPARER: Self-Prepared VERIFIER: VERIFICATION #: SCREENING DATE: 2018-11-12 PUBLISHED DATE: 2021-01-13 EXPIRY DATE: 2021-11-12

Health Product Declaration v2.2

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

DELTA-ADHESIVE LVC PRODUCT THRESHOLD: 1000 ppm **RESIDUALS AND IMPURITIES CONSIDERED: Yes** RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were considered based on process chemistry via Pharos Chemical and Material Library (CML). 6PPD, CARBON BLACK, POLYCYCLIC AROMATIC HYDROCARBONS - Associated with STYRENE BUTADIENE RUBBER (SBR). DISTILLATES (PETROLEUM), C6-RICH - Associated with N-HEXANE. OTHER PRODUCT NOTES: **METHYL ACETATE** ID: 79-20-9 HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2018-11-12 SUBSTANCE ROLE: Solvent %: 35.0000 - 55.0000 GS: LT-UNK RC: None NANO: No HAZARD TYPE AGENCY AND LIST TITLES WARNINGS PHY EU - GHS (H-Statements) H225 - Highly flammable liquid and vapour FYF EU - GHS (H-Statements) H319 - Causes serious eye irritation SUBSTANCE NOTES: N/A NAPHTHA (PETROLEUM), LIGHT STEAM-CRACKED, DEBENZENIZED, ID: 68132-00-3 POLYMERS, HYDROGENATED HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2018-11-12 SUBSTANCE ROLE: Adhesive %· 20.0000 - 30.0000 GS: LT-UNK BC: None NANO: No AGENCY AND LIST TITLES HAZARD TYPE WARNINGS None found No warnings found on HPD Priority Hazard Lists SUBSTANCE NOTES: N/A **STYRENE BUTADIENE RUBBER (SBR)** ID: 9003-55-8 HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2018-11-12 %: 10.0000 - 15.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Viscosity modifier HAZARD TYPE AGENCY AND LIST TITLES WARNINGS No warnings found on HPD Priority Hazard Lists None found SUBSTANCE NOTES: N/A

N-HEXANE

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZ	ARD SC	REENING DATE:	2018-11-12
%: 5.0000 - 15.0000	GS: LT-1	RC:	None	NANO: No	SUBSTANCE ROLE: Solvent
HAZARD TYPE	AGENCY AND LIST TITLES		WARN	INGS	
REP	CA EPA - Prop 65	Reproductive Toxicity - Male		- Male	
AQU	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects		c life with long lasting effects	
РНҮ	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour			
МАМ	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways			
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation			
REP	EU - GHS (H-Statements)	H361f - Suspected of damaging fertility			
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant			
END	ChemSec - SIN List	Endocrine Disruption			
END	TEDX - Potential Endocrine Disruptors	s Potential Endocrine Disruptor		sruptor	
MUL	German FEA - Substances Hazardous t Waters	to	Class	2 - Hazard to Wa	iters

SUBSTANCE NOTES: N/A

DISTILLATES (PETROLEUM), HYDROTREATED (MILD) HEAVY NAPHTHENIC (9CI);

ID: 64742-52-5

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2018-11-12		
%: 5.0000 - 15.0000	GS: LT-1	RC: None NANO: No SUBSTANCE ROLE: Viscosity modified		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans		
CAN	EU - GHS (H-Statements)	H350 - May cause cancer		
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man		
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant		
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters		
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence		
CAN	Japan - GHS	Carcinogenicity - Category 1A		
CAN	Australia - GHS	H350 - May cause cancer		

SUBSTANCE NOTES: N/A

PARACHLOROBENZOTRIFLUORIDE (PCBTF)

ID: 98-56-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2018-11-12

%: 5.0000 - 10.0000	GS: LT-P1	RC: Nor	NANO: No	SUBSTANCE ROLE: Solvent
HAZARD TYPE	AGENCY AND LIST TITLES	W	ARNINGS	
MUL	German FEA - Substances Hazardous t Waters	o Class 2 - Hazard to Waters		
SUBSTANCE NOTES: N/A				
SOLVENT NAPHTHA (PETROLEU	M), LIGHT ALIPHATIC			ID: 64742-89-8
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARI	SCREENING DATE:	2018-11-12
%: 1.0000 - 5.0000	GS: LT-1	RC: Nor	NANO: No	SUBSTANCE ROLE: Solvent
HAZARD TYPE	AGENCY AND LIST TITLES	W	ARNINGS	
MAM	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways		
GEN	EU - GHS (H-Statements)	H340 - May cause genetic defects		
CAN	EU - GHS (H-Statements)	H350 - May cause cancer		cer
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man		
GEN	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man		
MUL	ChemSec - SIN List		CMR - Carcinogen, Mutagen &/or Reproductive Toxican	
CAN	EU - Annex VI CMRs		Carcinogen Category 1B - Presumed Carcinogen based on animal evidence	
GEN	EU - Annex VI CMRs		Mutagen - Category 1B	
GEN	Australia - GHS		H340 - May cause genetic defects	

SUBSTANCE NOTES: N/A

CYCLOHEXANE

ID: 110-82-7

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2018-11-12
%: Impurity/Residual	GS: LT-P1	RC: None NANO: No SUBSTANCE ROLE: Impurity/Residua
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
РНҮ	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
МАМ	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation
MUL	German FEA - Substances Hazardous t Waters	to Class 2 - Hazard to Waters

SUBSTANCE NOTES: N/A

N-HEPTANE

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2018-11-12		
%: Impurity/Residual	GS: LT-P1	RC: None NANO: No SUBSTANCE ROLE: Impurity/Residual		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life		
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects		
РНҮ	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour		
МАМ	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways		
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
MUL	German FEA - Substances Hazardous Waters	Class 2 - Hazard to Waters		

SUBSTANCE NOTES: N/A

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	N/A		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: N/A CERTIFICATE URL:	ISSUE DATE: 2018-11- EXPIRY DATE: CERTIFIER OR LAB: N/A 12		
CERTIFICATION AND COMPLIANCE NOTES: No VO	C Emissions Certification required		
VOC CONTENT	OTC Model Rule for Adhesives and Sealants		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- EXPIRY DATE: CERTIFIER OR LAB: None 07		
CERTIFICATION AND COMPLIANCE NOTES:			
VOC CONTENT	SCAQMD Rule 1168 Adhesive and Sealant Applications		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- EXPIRY DATE: CERTIFIER OR LAB: None 07		
CERTIFICATION AND COMPLIANCE NOTES:			
VOC CONTENT	AVAQMD Rule 1168 Adhesive and Sealant Application		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- EXPIRY DATE: CERTIFIER OR LAB: None 07		
CERTIFICATION AND COMPLIANCE NOTES:			
VOC CONTENT	El Dorado County AQMD Rule 236 Adhesives		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- EXPIRY DATE: CERTIFIER OR LAB: None 07		
CERTIFICATION AND COMPLIANCE NOTES:			
VOC CONTENT	Placer County APCD Rule 235 Adhesives		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- EXPIRY DATE: CERTIFIER OR LAB: None 07		
CERTIFICATION AND COMPLIANCE NOTES:			
VOC CONTENT	Sacramento Metropolitan AQMD Rule 460 Adhesives and Sealants		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- EXPIRY DATE: CERTIFIER OR LAB: None 07		
CERTIFICATION AND COMPLIANCE NOTES:			
VOC CONTENT	San Diego County APDC Rule 67.21 Adhesive Material Application Operations		

CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- 07	EXPIRY DATE:	CERTIFIER OR LAB: None		
CERTIFICATION AND COMPLIANCE NOTES:					
VOC CONTENT	Santa Barbara APCD R	ule 353 Adhesives and \$	Sealants		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- 07	EXPIRY DATE:	CERTIFIER OR LAB: None		
CERTIFICATION AND COMPLIANCE NOTES:					
VOC CONTENT	Shasta County AQMD F	Rule 3:32 Adhesives and	Sealants		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- 07	EXPIRY DATE:	CERTIFIER OR LAB: None		
CERTIFICATION AND COMPLIANCE NOTES:					
VOC CONTENT	Tehama County APCD	Rule 4:40 Adhesives and	d Sealants		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- 07	EXPIRY DATE:	CERTIFIER OR LAB: None		
CERTIFICATION AND COMPLIANCE NOTES:					
VOC CONTENT	Ventura County APCD Rule 74.20 Adhesives and Sealants				
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- 07	EXPIRY DATE:	CERTIFIER OR LAB: None		
CERTIFICATION AND COMPLIANCE NOTES:					
VOC CONTENT	Yolo-Solano AQMD Rule 2.33 Adhesive Operations				
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2018-11- 07	EXPIRY DATE:	CERTIFIER OR LAB: None		
CERTIFICATION AND COMPLIANCE NOTES:					
VOC CONTENT	San Joaquin Valley Unified APCD Rule 4653 Adhesives				
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE: 2018-11- 07	EXPIRY DATE:	CERTIFIER OR LAB: None		

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

HPD URL: No HPD Available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: N/A

Section 5: General Notes

Job sites are neither reliably dry nor reliably dust or dirt free. While a membrane might adhere to a given substrate without primer, it will adhere to whatever it comes into contact with first. In most cases, that is the dust and the dirt. Because the dust and dirt are not bonded to the substrate, neither is the membrane truly adhered to the substrate. This is the role of DELTA®-ADHESIVE LVC. Primers prepare the surface for the proper adhesion of the membrane by consolidating all the dust and dirt, allowing intimate contact between the adhesive and the substrate. This product is recommended for use with membranes such as DELTA®-VENTS SA when applied to masonry, concrete, exterior grade gypsum board and metal surfaces APPLICATION: DELTA®-ADHESIVE LVC is applied by brush or roller. Rollers should have a heavy nap of natural material such as lamb's wool. Allow adhesive to dry 30 minutes before applying membrane, longer under cold conditions. Coated surfaces not covered by membrane during the working day must be re-coated. Please visit our web site at – www.dorken.com – for any additional information or contact our technical support team at 1-888-433-5824 ext. 326

MANUFACTURER INFORMATION

MANUFACTURER: Dörken Systems Inc. ADDRESS: 4655 Delta Way Beamsville Ontario LOR 1B4, Canada WEBSITE: www.dorken.com

CONTACT NAME: Krzysztof Apriasz TITLE: Technical Service Manager PHONE: 1-888-4DETLA4 (433-5824) x 326 EMAIL: kapriasz@dorken.com

LT-1 List Translator 1 (Likely Benchmark-1)

to a LT-1 or LTP1 score.)

NoGS No GreenScreen.

LT-UNK List Translator Benchmark Unknown (the chemical is

information contained within the list did not result in a clear mapping

present on at least one GreenScreen Specified List, but the

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity CAN Cancer DEV Developmental toxicity END Endocrine activity EYE Eye irritation/corrosivity GEN Gene mutation GLO Global warming LAN Land toxicity MAM Mammalian/systemic/organ toxicity MUL Multiple NEU Neurotoxicity NF Not found on Priority Hazard Lists OZO Ozone depletion PBT Persistent, bioaccumulative, and toxic PHY Physical hazard (flammable or reactive) REP Reproductive RES Respiratory sensitization SKI Skin sensitization/irritation/corrosivity UNK Unknown

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 (due to insufficient data)
LT-P1 List Translator Possible 1 (Possible Benchmark-1)

Recycled Types

PreC Pre-consumer recycled content PostC Post-consumer recycled content UNK Inclusion of recycled content is unknown None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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.