

HPD UNIQUE IDENTIFIER: 23881

CLASSIFICATION: 09 65 00 Resilient Flooring

PRODUCT DESCRIPTION: Helmicol 3416 is a two-part, solvent free urethane adhesive used for the permanent installation of ESD vinyl and rubber flooring products. Helmicol 3416 is low VOC and solvent free, yet is highly aggressive and cures to a flexible, conductive film for superior adhesion.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i>
<input type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	<input type="radio"/> Considered	Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	<input checked="" type="radio"/> Partially Considered	% weight and role provided for all substances.
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	<input type="radio"/> Not Considered	Screened <input type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input checked="" type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other	Explanation(s) provided for Residuals/Impurities?	<i>One or more substances not screened using Priority Hazard Lists with results disclosed and/ or one or more Special Condition did not follow guidance.</i>
<input checked="" type="radio"/> Product		<input checked="" type="radio"/> Yes <input type="radio"/> No	Identified <input type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input checked="" type="radio"/> No
			<i>One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.</i>

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

HELMICOL 3416 B [GRAPHITE LT-UNK TITANIUM DIOXIDE LT-1 | CAN | END TETRAETHYLENEMETHANAMINE LT-P1 | SKI | AQU | MUL 4-NONYLPHENOL (BRANCHED) LT-1 | AQU | END | MUL | REP | DEV | SKI | PBT DIAMINOPOLYPROPYLENE GLYCOL LT-P1 | MUL QUARTZ - NON-RESPIRABLE Not Screened CARBON BLACK BM-1 | CAN N-(2-AMINOETHYL)PIPERAZINE LT-P1 | SKI | MUL 1,4-BIS(AMINOCYCLOHEXYL)METHANE LT-P1 | MUL NATURALLY OCCURRING SUBSTANCES NoGS]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Ingredients above 1000 ppm and meeting US GHS SDS disclosure requirements are disclosed.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): <12 Regulatory (g/l): 50

Does the product contain exempt VOCs: No

Are ultra-low VOC tints available: N/A

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: VOC Emissions

VOC content: VOC Content

Management: ISO 9001:2015 Quality management systems

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-01-26

PUBLISHED DATE: 2021-02-23

EXPIRY DATE: 2024-01-26

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

HELMICOL 3416 B

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Partially

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are partially considered.

OTHER PRODUCT NOTES: Helmicol 3416 has been formulated to produce a superior, flexible bond required for use in high traffic applications. When dry does not promote growth of mold or mildew.

GRAPHITE

ID: 7782-42-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-01-26

#: 15.0000 - 40.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Filler

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-01-26

#: 7.0000 - 13.0000 GS: LT-1 RC: None NANO: No SUBSTANCE ROLE: Pigment

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES:

TETRAETHYLENEPENTAMINE

ID: 112-57-2

%: **7.0000 - 13.0000**GS: **LT-P1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Monomer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
AQU	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

4-NONYLPHENOL (BRANCHED)ID: **84852-15-3**%: **3.0000 - 7.0000**GS: **LT-1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Monomer**

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
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
END	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Chemical for Priority Action
MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
MUL	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - Action Plan in development
END	ChemSec - SIN List	Endocrine Disruption
REP	US EPA - PPT Chemical Action Plans	Reproductive effects
AQU	US EPA - PPT Chemical Action Plans	Highly toxic to aquatic organisms
DEV	US EPA - PPT Chemical Action Plans	Developmental Effects
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
REP	EU - GHS (H-Statements)	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Substance of Possible Concern
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)
END	EU - SVHC Authorisation List	Equivalent Concern - Candidate List

SUBSTANCE NOTES:

DIAMINOPOLYPROPYLENE GLYCOL

ID: 9046-10-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-26**%: **3.0000 - 7.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Intermediate**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES:

QUARTZ - NON-RESPIRABLEID: **Not Registered**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-26**%: **Impurity/Residual** GS: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	Hazard Screening not performed	

SUBSTANCE NOTES: *This product contains a material that may be hazardous when present as an airborne dust. Since this product is in a liquid form, the material is not able to become airborne and cannot be inhaled. Thus, the hazards usually associated with this material are not applicable to this product.

CARBON BLACK

ID: 1333-86-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-26**%: **1.0000 - 5.0000** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

SUBSTANCE NOTES:

N-(2-AMINOETHYL)PIPERAZINE

ID: 140-31-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-26**%: **1.0000 - 5.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Intermediate**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

1,4-BIS(AMINOCYCLOHEXYL)METHANE

ID: 1761-71-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-26**

%: **1.0000 - 5.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Intermediate**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES:

NATURALLY OCCURRING SUBSTANCES

ID: 999999-99-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-01-26**

%: **0.1000 - 1.0000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

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.

VOC EMISSIONS	VOC Emissions		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: 11110 Airport Road Olive Branch MS 38654 CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: VOC <12g/L	ISSUE DATE: 2021-02- 22	EXPIRY DATE: 2022- 03-01	CERTIFIER OR LAB: Helmitin Inc.
VOC CONTENT	VOC Content		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: 11110 Airport Road Olive Branch MS 38654 CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: VOC <12g/L	ISSUE DATE: 2021-02- 22	EXPIRY DATE: 2022- 03-01	CERTIFIER OR LAB: Helmitin Inc.
MANAGEMENT	ISO 9001:2015 Quality management systems		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Helmitin - Olive Branch, MS CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE: 2020-06- 21	EXPIRY DATE: 2023- 06-21	CERTIFIER OR LAB: SGS International

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

Helmicol 3416 can be used on porous and non-porous surfaces free of moisture. Surface to be covered must be dry, clean and smooth. Any foreign materials present such as paint, grease, oil, pen markings, adhesive residues, etc. that may prevent a proper bond or migrate to the surface causing a stain must be removed. Adhesive can be used on all grades of concrete on, above or below grade in the absence of moisture. Installation of a 10 mil. (0.010") or greater effective moisture retarder is recommended directly under all on and below grade concrete floors with its integrity insured. Concrete shall be prepared according to the recommendations outlined in ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring). Concrete floors shall be free from crazing, dusting, spalling and any curing or sealing compounds. Concrete floors shall be tested for moisture according to the latest revision of ASTM F2170 (Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes) and ASTM F1869 (Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride). Wood floors must be double construction with a 1" minimum thickness, structurally sound, securely fastened and free from deflection/spring. Top layer of wood shall be underlayment grade plywood. Cracks and uneven surfaces must be filled with an approved cement-based patching compound.

MANUFACTURER INFORMATION

MANUFACTURER: **Helmitin Inc.**
 ADDRESS: **11110 Airport Road**
Olive Branch Mississippi 38654, United States
 WEBSITE: **http://www.helmitin.com**

CONTACT NAME: **Scott Holman**
 TITLE: **Director of Compliance & IT**
 PHONE: **437-370-0042**
 EMAIL: **s.holman@helmitin.com**

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
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)	NoGS No GreenScreen.

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.