

HPD UNIQUE IDENTIFIER: 20824

CLASSIFICATION: 09960

PRODUCT DESCRIPTION: Environmentally friendly two-component water based aliphatic polyurethane with high chemical and abrasion resistance for industrial and residential use. Available in clear, colors, matte or gloss finish.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Other

Residuals/Impurities

- Considered
- Partially Considered
- Not Considered

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

All Substances Above the Threshold Indicated Are:

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

Screened Yes Ex/SC Yes 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

PERMASHIELD 200 [TRIETHANOLAMINE LT-P1 | RES | END TALC BM-1 |
CAN ACETONE LT-P1 | PHY | EYE | END | DEL POLYOXYETHYLATED
STEARYL ALCOHOL LT-P1 | MUL HEXANE, 1,6-DIISOCYANATO-,
HOMOPOLYMER (PRIMARY CASRN IS 28182-81-2) LT-P1
BUTOXYPROPANOL LT-UNK | SKI | EYE CYCLOHEXANAMINE, N,N-
DIMETHYL-, COMPDs. WITH 3-(CYCLOHEXYLAMINO)-1-
PROPANESULFONIC ACID-BLOCKED 1,6-DIISOCYANATOHEXANE
HOMOPOLYMER NoGS TITANIUM DIOXIDE LT-1 | CAN | END ACETONE
LT-P1 | PHY | EYE | END | DEL TRIETHYLENE GLYCOL MONOBUTYL
ETHER LT-UNK | EYE POLY(OXY-1,2-ETHANEDIYL), ALPHA-2-PROPENYL-
OMEGA-HYDROXY LT-UNK ETHYLENE GLYCOL MONOBUTYL ETHER
(EGBE) BM-2 | SKI | EYE | END]

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:

Full Inventory Listed

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 5 Regulatory (g/l): 3
Does the product contain exempt VOCs: No
Are ultra-low VOC tints available: Yes

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: CA SECTION 01350 COMPLIANT
VOC content: ASTM D6886-14e1

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:
VERIFICATION #:

SCREENING DATE: 2020-02-12

PUBLISHED DATE: 2020-06-25

EXPIRY DATE: 2023-02-12



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

PERMASHIELD 200

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Data provide is complete and precise. No residuals or impurities.

OTHER PRODUCT NOTES: N/A

TRIETHANOLAMINE

ID: 102-71-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-02-12

#: 0.5000 - 2.5000

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Buffer

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Anionic polyacrylate dispersion

TALC

ID: 14807-96-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-02-12

#: 0.5000 - 1.0000

GS: BM-1

RC: None

NANO: No

SUBSTANCE ROLE: Filler

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: high purity, ultra-fine talc

ACETONE

ID: 67-64-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-02-12

%: **0.3500 - 0.4000**

GS: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEVELOPMENTAL	MAK	Pregnancy Risk Group B

SUBSTANCE NOTES: **0.1-1% Acetone anionic polyacrylic dispersion**

POLYOXYETHYLATED STEARYL ALCOHOL

ID: **9005-00-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

%: **0.1800 - 0.2500**

GS: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Defoamer**

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

SUBSTANCE NOTES: **emulsion defoamer based on polyether**

HEXANE, 1,6-DIISOCYANATO-, HOMOPOLYMER (PRIMARY CASRN IS 28182-81-2)

ID: **2005473-84-5**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

%: **0.1400 - 0.2400**

GS: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Activator**

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

SUBSTANCE NOTES: **Iso**

BUTOXYPROPANOL

ID: **5131-66-8**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

%: **0.0500 - 0.0900**

GS: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Surface modifier**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation

SUBSTANCE NOTES: polyether modified polymethylalkylsiloxane. Acts as a silicone based leveling agent.

CYCLOHEXANAMINE, N,N-DIMETHYL-, COMPDS. WITH 3-(CYCLOHEXYLAMINO)-1-PROPANESULFONIC ACID-BLOCKED 1,6-DIISOCYANATOHXANE HOMOPOLYMER

ID: 666723-27-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

#: **0.0300 - 0.0600**

GS: **NoGS**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Activator**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Iso**

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

#: **0.0100 - 11.0000**

GS: **LT-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Pigment**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

CANCER

MAK

Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

CANCER

MAK

Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES:

ACETONE

ID: 67-64-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

#: **0.0030 - 0.0350**

GS: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEVELOPMENTAL	MAK	Pregnancy Risk Group B

SUBSTANCE NOTES:

TRIETHYLENE GLYCOL MONOBUTYL ETHER

ID: 143-22-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

#: **0.0010 - 0.0030**

GS: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Viscosity modifier**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage

SUBSTANCE NOTES: non-ionic rheology additive, low shear

POLY(OXY-1,2-ETHANEDIYL), ALPHA-2-PROPENYL-OMEGA-HYDROXY

ID: 27274-31-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

#: **0.0004 - 0.0013**

GS: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Surfactant**

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

SUBSTANCE NOTES: silicone surfactant, substrate wetting

ETHYLENE GLYCOL MONOBUTYL ETHER (EGBE)

ID: 111-76-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-02-12**

#: **0.0004 - 0.0004**

GS: **BM-2**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Surface modifier**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: polyether modified polymethylalkylsiloxane.

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

CA SECTION 01350 COMPLIANT

CERTIFYING PARTY: **Third Party**

APPLICABLE FACILITIES: **UL Environment - Marietta, 2211 Newmarket Parkway, Marietta, GA 30067-9399**

CERTIFICATE URL:

<https://secureservercdn.net/72.167.241.180/029.1eb.myftpupload.com/wp-content/uploads/2017/11/Permashield-200-CDPH-01350-Compliant.pdf>

ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB:
2020-04-10	2025-04-10	UL Environment - Marietta, 2211 Newmarket Parkway, Marietta, GA 30067-9399

CERTIFICATION AND COMPLIANCE NOTES: **CA SECTION 01350 COMPLIANT Low-emitting materials**

VOC CONTENT

ASTM D6886-14e1

CERTIFYING PARTY: **Self-declared**

APPLICABLE FACILITIES: **Monopole, Inc.**

CERTIFICATE URL:

ISSUE DATE: **2020-04-10**

EXPIRY DATE: **2025-04-10**

CERTIFIER OR LAB: **Monopole, Inc.**

CERTIFICATION AND COMPLIANCE NOTES:

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

PERMASHIELD 200 is the most advanced two-component water-based aliphatic polyurethane on the market. The unique high performance structure exhibits outstanding film hardness and excellent resistance against abrasions, chemicals, stains, direct/reverse impacts and ultraviolet light. **BASIC USES:** PERMASHIELD 200 can be applied to interior, exterior, vertical or horizontal, concrete, masonry, stucco, wood, vinyl-composite tile (VCT), and prepared ferrous and non ferrous metals, etc. It can be used as an industrial or residential coating for: commercial buildings, convention centers, stadiums, hospitals, warehouse floors, garages, universities, airports, shopping centers, schools, food processing plants, transportation, government facilities, etc. PERMASHIELD 200 is urine resistant for use in pet & dog kennels. **RECOMMENDED PRIMERS:** MONOCHEM 21: Ideal for non-porous surfaces and coating over water/oil/solvent/alkyd/unknown based coatings. MONOBOND: Ideal for coating over single component water based coatings and most smoother surfaces. **FEATURES:** Universally Compliant, Environmentally Friendly, Low VOC HAPS Free (Hazardous Air Pollutants), No Fumes Suitable for USDA Inspected Facilities Top Tier Chemical, Solvent, Water, Oil and Graffiti Resistance Outstanding Hardness, Durability and Abrasion Resistance Top Tier Cleanability and Stain Resistance Resistant to Hot Tire Pick-Up Flash Rust Inhibitive formula for DTM Environments High Solids, Versatile General Maintenance Coating Available in High Gloss 90°, Matte 5°, Clear or



MANUFACTURER INFORMATION

MANUFACTURER: **Monopole, Inc.**

ADDRESS: **4661 Alger Street**

Los Angeles CA 90039, USA

WEBSITE: **www.monopoleinc.com**

CONTACT NAME: **Angela Wooddell**

TITLE: **Director of Operations**

PHONE: **818-500-8585**

EMAIL: **angela@monopoleinc.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

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)

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

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.)

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.