Monochem 21
by Monopole, Inc.

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 29361
CLASSIFICATION: 09 96 00 High-Performance Coatings
PRODUCT DESCRIPTION: MONOCHEM 21 is a 2-component, 100% solids, high-build, liquid applied, Polyamine, Cyclo-Aliphatic Epoxy. MONOCHEM 21 is available in high gloss, clear, standard colors and can be mixed with decorative chips, color micas, or silica sand. It is designed as a high performance primer, base coat or interior top coat.

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 Evaluation
- ○ Completed
- ○ Partially Completed
- ◉ Not Completed

Explanation(s) provided :
- ◉ Yes ○ No

For all contents above the threshold, the manufacturer has:

Characterized ◉ Yes ○ No
Provided weight and role.

Screened ◉ Yes ○ No
Provided screening results using HPDC-approved methods.

Identified ◉ Yes ○ No
Provided name and CAS RN or other 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.

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

MONOCHEM 21 [ARALDITE B LT-P1 | END BENZYL ALCOHOL BM-2 2-CYCLOHEXENE-1-OCTANOIC ACID, 5(OR 6)-CARBOXY-4-HEXYL-, COMPD. WITH 2-AMINO-2-METHYL-1-PROPANOL NoGS TITANIUM DIOXIDE LT-1 | CAN | END TRIMETHYLOLPROPANE TRIACRYLATE LT-P1 | SKI | CAN | RES | MUL | EYE ALKYL (C12, C14) GLYCIDYL ETHER LT-P1 | MUL | SKI AROMATIC NAPHTHA, TYPE 1 LT-1 | END | CAN | MUL | GEN | MAM DIISOBUTYL KETONE LT-UNK]

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 10 Regulatory (g/l): 10
Does the product contain exempt VOCs: No
Are colorants available that do not increase the VOC content of the base paint when tinted: Yes

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: ASTM D5116
VOC content: ASTM D6886-14e1

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?
- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2022-03-14
PUBLISHED DATE: 2022-07-25
EXPIRY DATE: 2025-03-14

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

MONOCHEM 21

PRODUCT THRESHOLD: **Per GHS SDS** RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **No**

RESIDUALS AND IMPURITIES NOTES: **There are no residuals or impurities to report.**

OTHER PRODUCT NOTES:

ARALDITE B ID: 25085-99-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-14 15:34:45**

%: **54.0000 - 60.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	EU - Priority Endocrine Disruptors	Category 2 - In vitro evidence of biological activity related to Endocrine Disruption

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: **Liquid Epoxy Resin - Bisphenyl A**
Clear Formulation: 60%
White Base: 54%

BENZYL ALCOHOL ID: 100-51-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-23 13:55:21**

%: **7.0000 - 17.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Accelerator**

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

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

2-CYCLOHEXENE-1-OCTANOIC ACID, 5(OR 6)-CARBOXY-4-HEXYL-, COMPD. WITH 2-AMINO-2-METHYL-1-PROPANOL ID: 68128-58-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-23 13:56:36**

%: **7.0000 - 17.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

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

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Cycloaliphatic amine curing agent component

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-23 14:02:11**

%: **8.0000 - 12.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Ingredient used in the White Base at ~10%

TRIMETHYLOLPROPANE TRIACRYLATE

ID: 15625-89-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-14 15:38:59**

%: **7.0000 - 10.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Diluent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	IARC	Group 2b - Possibly carcinogenic to humans
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: acrylate functional diluents
improved adhesion, hardness, chemical resistance & thermal resistance properties as compared to TPGDA.

ALKYL (C12, C14) GLYCIDYL ETHER

ID: 68609-97-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-14 15:35:41**

%: **2.0000 - 4.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Diluent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Diluent

AROMATIC NAPHTHA, TYPE 1

ID: 64742-95-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-14 15:40:13**

%: **0.5000 - 1.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Surfactant**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
GEN	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
GEN	EU - Annex VI CMRs	Mutagen - Category 1B
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	GHS - Australia	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H304 - May be fatal if swallowed and enters airways [Aspiration hazard - Category 1]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Acrylic Leveling Additives with Air Release Properties

DIISOBUTYL KETONE ID: 108-83-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2022-03-14 15:40:57**

%: **0.0400 - 0.1000** GreenScreen: **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

ADDITIONAL LISTINGS	AGENCY AND LIST TITLES	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Acrylic Leveling Additives with Air Release Properties

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 — **ASTM D5116**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Monopole Facility
CERTIFICATE URL:

ISSUE DATE: 2022-03-16
EXPIRY DATE: 2024-03-16

CERTIFIER OR LAB: Monopole In House Lab

CERTIFICATION AND COMPLIANCE NOTES: This test has not been completed

VOC CONTENT — **ASTM D6886-14e1**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Monopole Facility
CERTIFICATE URL:

ISSUE DATE: 2022-03-16
EXPIRY DATE: 2024-03-16

CERTIFIER OR LAB: Monopole In House Lab

CERTIFICATION AND COMPLIANCE NOTES: Material (g/l): 10 Regulatory (g/l): 10

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.

PERMASHIELD 200
MANUFACTURER (OR GENERIC): **Monopole, Inc.**

HPD URL: https://secureservercdn.net/72.167.241.180/029.1eb.myftpupload.com/wp-content/uploads/2020/07/Permashield_200.pdf
ACCESSORY TYPE:
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Monochem 21 is a high performance primer that should be used prior to the application of Permashield 200 topcoat for floors.

MONOCHEM 21 COLORS
MANUFACTURER (OR GENERIC): **Monopole, Inc.**

HPD URL: No HPD Available
ACCESSORY TYPE: Maintenance Product
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Monochem 21 Epoxy Primer is available in clear and colors.

Section 5: General Notes

MONOCHEM 21 can be used as an epoxy primer with all the MONOCHEM decking systems. MONOCHEM 21 can be pigmented to any color or used in combination with color quartz, paint chips, micas or light aggregates. It may also be used over almost all water, oil, solvent, alkyd base, coatings or stains.

MONOCHEM 21 is also ideal for top-coating unknown coatings, glazed, sealed and very smooth non-porous surfaces. MONOCHEM 21 can be applied on concrete, prepared metal (non ferrous), wood, glass, reinforced plastics, polyurethane elastomeric coatings, glazed surfaces and many other non porous substrates maximizing the adhesion between the substrate and top coat.

MONOCHEM 21 as a FINISH COAT: It is also a very durable coating that is recommended for protecting and dust-proofing interior concrete floors in warehouses, manufacturing plants, residential/industrial garages, mechanical rooms and commercial kitchens where seamless, chemically resistant floors are desired. MONOCHEM 21 is not UV stable and must be topcoated with a pigmented coating if exposed to UV.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Monopole, Inc.**
ADDRESS: **4661 Alger Street**
Los Angeles CA 90039, United States
WEBSITE: **www.monopoleinc.com**

CONTACT NAME: **Angela Wooddell**
TITLE: **Leed Administrator**
PHONE: **18185008585**
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
NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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.