

Pre- Painted Aluminum Coils for Roofing & Claddings, Facade, Interior Ceilings by United Metal Coating LLC

Health Product Declaration v2.2

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 22841

CLASSIFICATION: 05 33 23 Aluminum Roof Decking

PRODUCT DESCRIPTION: The Pre-painted Aluminum Coils are available in different types of coating, thickness, widths, lengths based on customer requirements. The Aluminum Coils can be used in various architectural and industrial applications such as Roofing & Claddings, Facade & Awnings, Interior ceilings, Sign Boards, Rainwater goods like Gutter, Downspout, Cold Storage/Food Storage/Food Processing centers, Rolling shutters, White Goods, Truck/ Trailer/ Caravan Bodies, Car number plates, Lighting/automobile industries, Instruments/ Dial Gauges Hospital / School and Hygiene End-uses and Aluminium Composite Panels.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

<p>Inventory Reporting Format</p> <p><input checked="" type="radio"/> Nested Materials Method <input type="radio"/> Basic Method</p> <p>Threshold Disclosed Per</p> <p><input type="radio"/> Material <input checked="" type="radio"/> Product</p>	<p>Threshold level</p> <p><input checked="" type="radio"/> 100 ppm <input type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Other</p>	<p>Residuals/Impurities</p> <p>Residuals/Impurities Considered in 0 of 6 Materials</p> <p>Explanation(s) provided for Residuals/Impurities?</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>All Substances Above the Threshold Indicated Are:</i></p> <p>Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No <i>% weight and role provided for all substances.</i></p> <p>Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No <i>All substances screened using Priority Hazard Lists with results disclosed.</i></p> <p>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></p>
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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

ALUMINUM ALLOY SHEETS IN COILS [ALUMINIUM, NoGS
MANGANESE LT-P1 | END | MUL | REP MAGNESIUM LT-UNK | PHY
IRON, ELEMENTAL LT-P1 | END SILICON, ELEMENTAL LT-UNK ZINC,
ELEMENTAL LT-P1 | AQU | PHY | END | MUL COPPER LT-P1 | MUL
CHROMIUM LT-P1 | RES | END | SKI TITANIUM LT-UNK] HDPE GOLD/
UC2031007 BECKRYTECH 2800 [AROMATIC HYDROCARBONS, C10
NoGS ETHYLENE GLYCOL MONO-N-BUTYL ETHER BM-2 | SKI | EYE |
END ISOBUTYL ALCOHOL BM-2 | SKI | EYE 2,3-EPOXYPROPYL
NEODECANOATE, OLIGOMERIC REACTION PRODUCTS WITH
TOLUENE-4-SULFONIC ACID NoGS XYLENES BM-1 | SKI | END | MUL |
REP AROMATIC NAPHTHA, TYPE 1 LT-1 | MAM | GEN | CAN | MUL |
END DECANEDIOIC ACID, 1,10-BIS(1,2,2,6,6-PENTAMETHYL-4-
PIPERIDINYL) ESTER BM-1 | PBT | MUL METHOXYISOPROPYL
ACETATE LT-UNK ETHYLBENZENE BM-1 | CAN | PHY | MAM | END |
SKI | REP MALEIC ACID LT-UNK | SKI | EYE BUTYL ALCOHOL BM-2 |
SKI | EYE TIN OXIDE LT-UNK METHYL 1,2,2,6,6-PENTAMETHYL-4-
PIPERIDYL SEBACATE LT-P1 | MUL] PE ARABIAN BEIGE-UC1031085
BECKRYPOL 1000 (ALTERNATE 1) [(POLYETHYL)BENZENES BM-1 |
MAM | MUL ETHYLENE GLYCOL MONO-N-BUTYL ETHER BM-2 | SKI |
EYE | END XYLENES BM-1 | SKI | END | MUL | REP SILICON DIOXIDE
BM-1 | CAN BUTYL ALCOHOL BM-2 | SKI | EYE AROMATIC

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:

The product included in this HPD is a Pre-painted Aluminum Coil used for various architectural and industrial applications. Various sizes and thickness are accounted for by the ranges and raw materials presented in this HPD. The aluminum alloy does not have a CAS number and as such, the HPD is marked No for identified.

HYDROCARBONS, C9-10 LT-P1 | MUL] WHITE PU PRIMER RAK
 BECKRYPRIM 260 (ALTERNATE 2) [AROMATIC HYDROCARBONS,
 C10 NoGS (POLYETHYL)BENZENES BM-1 | MAM | MUL DIETHYLENE
 GLYCOL MONO-N-BUTYL ETHER LT-P1 | EYE | END
 METHOXYISOPROPYL ACETATE LT-UNK ETHYLENE GLYCOL
 MONO-N-BUTYL ETHER BM-2 | SKI | EYE | END XYLENES BM-1 | SKI |
 END | MUL | REP AROMATIC NAPHTHA, TYPE 1 LT-1 | MAM | GEN |
 CAN | MUL | END 1,2,4-TRIMETHYLBENZENE BM-2 | AQU | SKI | EYE |
 MUL BISPHENOL A EPICHLOROHYDRIN POLYMER LT-P1 | AQU | SKI
 | EYE | MUL 1,2,3-TRIMETHYLBENZENE BM-2 DIETHYLBENZENE
 (MIXED ISOMERS) LT-P1 | MUL NAPHTHALENE LT-1 | CAN | PBT |
 AQU | MUL | END MESITYLENE BM-2 | AQU DIBUTYLTIN DILAURATE
 LT-1 | GEN | REP | MAM | MUL | END | CAN | DEV] PU BLACK B.C -
 UC3139101 BECKRYTAN 820 L (ALTERNATE 3) [AROMATIC
 HYDROCARBONS, C10 NoGS (POLYETHYL)BENZENES BM-1 | MAM |
 MUL ETHYLENE GLYCOL MONO-N-BUTYL ETHER BM-2 | SKI | EYE |
 END BISPHENOL A EPICHLOROHYDRIN POLYMER LT-P1 | AQU | SKI |
 EYE | MUL 1,2,4-TRIMETHYLBENZENE BM-2 | AQU | SKI | EYE | MUL
 AROMATIC NAPHTHA, TYPE 1 LT-1 | MAM | GEN | CAN | MUL | END]
 ALM-845 SILVER 860 M / PVDF BECKRYFLOUR 630 (ALTERNATE 4) [
 ISOPHORONE LT-UNK | CAN | EYE 2-(2-ETHOXYETHOXY)ETHANOL
 ACETATE LT-UNK AROMATIC HYDROCARBONS, C8 LT-1 | GEN | CAN
 | MUL DIMETHYL PHTHALATE LT-P1 | END AROMATIC NAPHTHA,
 TYPE 1 LT-1 | MAM | GEN | CAN | MUL | END C9-11
 ALKANE/CYCLOALKANE BM-1 | PBT | MAM | GEN | CAN | MUL
 XYLENES BM-1 | SKI | END | MUL | REP BUTYL ACETATE LT-UNK
 BUTYL ALCOHOL BM-2 | SKI | EYE TALC BM-1 | CAN
 POLYVINYLIDENE FLUORIDE LT-UNK BARIUM SULFATE BM-2 | CAN
]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: Inherently Non-emitting source per LEED
 LCA: Environmental Product Declaration (EPD)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:
 VERIFICATION #:

SCREENING DATE: 2020-10-25

PUBLISHED DATE: 2020-11-07

EXPIRY DATE: 2023-10-25

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

ALUMINUM ALLOY SHEETS IN COILS

%: 100.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered. Only those intentionally added ingredients above 100 ppm are included.

OTHER MATERIAL NOTES: All substances in this material are below the reportable threshold.

ALUMINIUM,

ID: 15629-83-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-10-25

%: 96.0000 - 97.0000

GS: NoGS

RC: UNK

NANO: No

SUBSTANCE ROLE: Alloy element

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the aluminum alloy matrix. Due to the commodity nature of aluminum alloy, the status of recycled content is unknown.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-10-25

%: 0.3000 - 0.8000

GS: LT-P1

RC: UNK

NANO: No

SUBSTANCE ROLE: Structure component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

GHS - Japan

Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

MAGNESIUM

ID: 7439-95-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-10-25

%: 0.2000 - 0.8000

GS: LT-UNK

RC: UNK

NANO: No

SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

IRON, ELEMENTAL

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 0.7000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

SILICON, ELEMENTAL

ID: 7440-21-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 0.6000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

ZINC, ELEMENTAL

ID: 7440-66-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 0.4000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

COPPER

ID: 7440-50-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **0.0000 - 0.3000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

CHROMIUM

ID: 7440-47-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **0.0000 - 0.2000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

TITANIUM

ID: 7440-32-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **0.0000 - 0.1000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: Part of substrate. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

HDPE GOLD/ UC2031007 BECKRYTECH 2800%: **100.0000**PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: **No** MATERIAL TYPE: **Other: Coating**

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered.

OTHER MATERIAL NOTES: All substances in this material are below the reportable threshold. Used as coating or related material. Application by Rollercoating.

AROMATIC HYDROCARBONS, C10

ID: 1189173-42-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **12.5000 - 25.0000** GS: **NoGS** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

ETHYLENE GLYCOL MONO-N-BUTYL ETHER

ID: 111-76-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **1.0000 - 12.5000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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: An amount is added to protect the proprietary nature of the formulation.

ISOBUTYL ALCOHOL

ID: 78-83-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **1.0000 - 12.5000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

2,3-EPOXYPROPYL NEODECANOATE, OLIGOMERIC REACTION PRODUCTS WITH TOLUENE-4-SULFONIC ACID

ID: 98362-33-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **0.0000 - 1.0000** GS: **NoGS** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

XYLENES

ID: 1330-20-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **0.0000 - 1.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

AROMATIC NAPHTHA, TYPE 1

ID: 64742-95-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

%: **0.0000 - 1.0000** GS: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	GHS - Australia	H340 - May cause genetic defects
CANCER	GHS - Australia	H350 - May cause cancer

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

DECANEDIOIC ACID, 1,10-BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL) ESTER

ID: 41556-26-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

%: **0.0000 - 1.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

METHOXYISOPROPYL ACETATE

ID: 108-65-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-10-25	
%: 0.0000 - 1.0000 GS: LT-UNK RC: UNK NANO: No SUBSTANCE ROLE: Coating		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The amount is added to protect the proprietary nature of the formulation.

ETHYLBENZENE

ID: 100-41-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-10-25	
%: 0.0000 - 1.0000 GS: BM-1 RC: UNK NANO: No SUBSTANCE ROLE: Coating		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1A [H360]
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

MALEIC ACID

ID: 110-16-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2020-10-25
%: 0.0000 - 1.0000 GS: LT-UNK RC: UNK NANO: No SUBSTANCE ROLE: Coating	

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

BUTYL ALCOHOL

ID: 71-36-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 1.0000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

TIN OXIDE

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 1.0000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL SEBACATE

ID: 82919-37-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 1.0000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation.

PE ARABIAN BEIGE-UC1031085 BECKRYPOL 1000 (ALTERNATE 1)

%: 100.0000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: **No** MATERIAL TYPE: **Other: Coating**

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered

OTHER MATERIAL NOTES: All substances in this material are below the reportable threshold. Coating or related material. Application by Rollercoating.

(POLYETHYL)BENZENES

ID: 64742-94-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **12.5000 - 20.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

ETHYLENE GLYCOL MONO-N-BUTYL ETHER

ID: 111-76-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **3.0000 - 10.0000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

XYLENES

ID: 1330-20-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **3.0000 - 10.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

SILICON DIOXIDE

ID: 7631-86-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **3.0000 - 10.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	GHS - Japan	Carcinogenicity - Category 1A [H350]
CANCER	GHS - Australia	H350i - May cause cancer by inhalation

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

BUTYL ALCOHOL

ID: 71-36-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-10-25		
#: 1.0000 - 3.0000	GS: BM-2	RC: UNK	NANO: No	SUBSTANCE ROLE: Coating
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation		
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage		

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

AROMATIC HYDROCARBONS, C9-10

ID: 93821-31-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-10-25		
#: 0.3000 - 1.0000	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Coating
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

WHITE PU PRIMER RAK BECKRYPRIM 260 (ALTERNATE 2) %: 100.0000

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES CONSIDERED: No	MATERIAL TYPE: Other: Coating
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RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered.

OTHER MATERIAL NOTES: All substances in this material are below the reportable threshold. Coating or related material. Application by Rollercoating.

AROMATIC HYDROCARBONS, C10

ID: 1189173-42-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-10-25		
#: 12.5000 - 25.0000	GS: NoGS	RC: UNK	NANO: No	SUBSTANCE ROLE: Coating
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

(POLYETHYL)BENZENES

ID: 64742-94-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **1.0000 - 12.5000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

DIETHYLENE GLYCOL MONO-N-BUTYL ETHER

ID: 112-34-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **1.0000 - 12.5000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

METHOXYISOPROPYL ACETATE

ID: 108-65-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **1.0000 - 12.5000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

ETHYLENE GLYCOL MONO-N-BUTYL ETHER

ID: 111-76-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **1.0000 - 12.5000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

XYLENES

ID: 1330-20-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

%: **1.0000 - 12.5000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

AROMATIC NAPHTHA, TYPE 1

ID: 64742-95-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

%: **1.0000 - 12.5000** GS: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	GHS - Australia	H340 - May cause genetic defects
CANCER	GHS - Australia	H350 - May cause cancer

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

1,2,4-TRIMETHYLBENZENE

ID: 95-63-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **1.0000 - 12.5000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

BISPHENOL A EPICHLOROHYDRIN POLYMER

ID: 25068-38-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **1.0000 - 12.5000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
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
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

1,2,3-TRIMETHYLBENZENE

ID: 526-73-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-10-25		
%: 0.0000 - 1.0000	GS: BM-2	RC: UNK	NANO: No	SUBSTANCE ROLE: Coating
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

DIETHYLBENZENE (MIXED ISOMERS)

ID: 25340-17-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-10-25		
%: 0.0000 - 1.0000	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Coating
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

NAPHTHALENE

ID: 91-20-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-10-25		
%: 0.0000 - 1.0000	GS: LT-1	RC: UNK	NANO: No	SUBSTANCE ROLE: Coating

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US EPA - IRIS Carcinogens	(1986) Group C - Possible human Carcinogen
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Toxics Release Inventory PBTs	PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	ChemSec - SIN List	Endocrine Disruption
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

MESITYLENE

ID: 108-67-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 1.0000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

DIBUTYLTIN DILAURATE

ID: 77-58-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 %: **0.0000 - 1.0000** GS: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
GENE MUTATION	EU - GHS (H-Statements)	H341 - Suspected of causing genetic defects
REPRODUCTIVE	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
REPRODUCTIVE	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 2 - Substances which should be regarded as if they impair fertility or cause Developmental Toxicity in humans
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	ChemSec - SIN List	Endocrine Disruption
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
DEVELOPMENTAL	MAK	Pregnancy Risk Group B
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
REPRODUCTIVE	GHS - Australia	H360FD - May damage fertility. May damage the unborn child

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

PU BLACK B.C - UC3139101 BECKRYTAN 820 L (ALTERNATE 3)

#: 100.0000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: No MATERIAL TYPE: Other: Coating

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered.

OTHER MATERIAL NOTES: All substances in this material are below the reportable threshold. Coating or related material. Application by Rollercoating.

AROMATIC HYDROCARBONS, C10

ID: 1189173-42-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**
 #: **10.0000 - 12.5000** GS: **NoGS** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **3.0000 - 10.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

ETHYLENE GLYCOL MONO-N-BUTYL ETHER

ID: 111-76-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **3.0000 - 10.0000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

BISPHENOL A EPICHLOROHYDRIN POLYMER

ID: 25068-38-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **0.3000 - 1.0000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
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
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

1,2,4-TRIMETHYLBENZENE

ID: 95-63-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **0.0000 - 0.3000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

AROMATIC NAPHTHA, TYPE 1

ID: 64742-95-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **0.0000 - 0.3000** GS: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	GHS - Australia	H340 - May cause genetic defects
CANCER	GHS - Australia	H350 - May cause cancer

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

ALM-845 SILVER 860 M / PVDF BECKRYFLOUR 630 (ALTERNATE 4)

#: **100.0000**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: No MATERIAL TYPE: Other: Coating

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered.

OTHER MATERIAL NOTES: All substances in this material are below the reportable threshold. Coating or related material. Application by Rollercoating.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **25.0000 - 50.0000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US EPA - IRIS Carcinogens	(1986) Group C - Possible human Carcinogen
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

2-(2-ETHOXYETHOXY)ETHANOL ACETATE

ID: 112-15-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **1.0000 - 12.5000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

AROMATIC HYDROCARBONS, C8

ID: 90989-38-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**%: **1.0000 - 12.5000** GS: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	GHS - Australia	H340 - May cause genetic defects
CANCER	GHS - Australia	H350 - May cause cancer

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

DIMETHYL PHTHALATE

ID: 131-11-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **1.0000 - 12.5000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

AROMATIC NAPHTHA, TYPE 1

ID: 64742-95-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **1.0000 - 12.5000** GS: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	GHS - Australia	H340 - May cause genetic defects
CANCER	GHS - Australia	H350 - May cause cancer

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

C9-11 ALKANE/CYCLOALKANE

ID: 64742-48-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **1.0000 - 12.5000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	GHS - Australia	H340 - May cause genetic defects
CANCER	GHS - Australia	H350 - May cause cancer

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

XYLENES

ID: 1330-20-7

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-10-25		
%: 1.0000 - 12.5000 GS: BM-1 RC: UNK NANO: No SUBSTANCE ROLE: Coating		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

BUTYL ACETATE

ID: 123-86-4

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-10-25		
%: 1.0000 - 12.5000 GS: LT-UNK RC: UNK NANO: No SUBSTANCE ROLE: Coating		
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

BUTYL ALCOHOL

ID: 71-36-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **0.0000 - 1.0000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage

SUBSTANCE NOTES: An amount is added to protect the proprietary nature of the formulation. The GreenScreen Benchmark Score was sourced from the Pharos chemicals database.

TALC

ID: 14807-96-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **0.0000 - 0.3700** GS: **BM-1** RC: **UNK** 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: The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

POLYVINYLIDENE FLUORIDE

ID: 24937-79-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **0.0000 - 3.1400** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Polymer species**

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

SUBSTANCE NOTES: The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

BARIUM SULFATE

ID: 7727-43-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-10-25**

#: **0.0000 - 0.1000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: The GreenScreen Benchmark score was sourced from the Pharos chemicals database.

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	Inherently Non-emitting source per LEED		
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE: 2020-09- 22	EXPIRY DATE:	CERTIFIER OR LAB: NA
LCA	Environmental Product Declaration (EPD)		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: UMC, Dubai, UAE CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE: 2018-09- 10	EXPIRY DATE: 2023- 09-10	CERTIFIER OR LAB: The International EPD® System

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

MANUFACTURER INFORMATION

MANUFACTURER: United Metal Coating LLC
ADDRESS: Dubai Industrial Park
 Dubai Industrial City Dubai P.O 181837, UAE
WEBSITE: <http://www.umcuae.ae>

CONTACT NAME: GD Kulkarni
TITLE: Works Manager
PHONE: +971 44253976
EMAIL: kulkarni@umcuae.ae

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)	NoGS No GreenScreen.
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.