

CLASSIFICATION: 08 83 00

created via: HPDC Online Builder

PRODUCT DESCRIPTION: This HPD covers Walker's Acid-etched Mirrors in multiple colors and dimensions. Acid-etched Mirrors are suitable for interior applications only. Available colors: Clear, bronze, grey, black, blue, ultra-clear, green, etc. Mirror standard thicknesses: 3mm to 6mm (1/8" to 1/4"). Available sizes: Standard size 96" x 130", subject to float glass availability. Other applicable CSI Masterformat identifiers: 08 85 00 - Glazing Accessories.

Section 1: Summary

Nested 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
 Per OSHA MSDS
 Other

Residuals/Impurities

Residuals/Impurities Considered in 2 of 4 Materials

Explanation(s) provided for Residuals/Impurities?

- Yes No

Are All Substances Above the Threshold Indicated:

Characterized Yes No
Percent Weight and Role Provided?

Screened Yes No
Using Priority Hazard Lists with Results Disclosed?

Identified Yes No
Name and Identifier Provided?

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

ACID-ETCHED GLASS | SILICA, AMORPHOUS (SILICON DIOXIDE) **LT-P1** | CAN SODIUM OXIDE (SODIUM OXIDE) **LT-UNK** CALCIUM OXIDE (CALCIUM OXIDE) **LT-P1** MAGNESIUM OXIDE (MAGNESIUM OXIDE) **LT-UNK** ALUMINUM OXIDE (ALUMINUM OXIDE) **LT-P1** | RES SODIUM SULFATE (SALT CAKE) **LT-UNK** FERRIC OXIDE (DIIRON TRIOXIDE) **BM-2** | CAN CARBON (COAL) **LT-UNK** COBALT COMPOUNDS (COBALT COMPOUNDS) **LT-1** | RES | CAN | GEN NICKEL COMPOUNDS (NICKEL COMPOUNDS) **LT-1** | CAN | RES] **TOP COAT** [BARIUM SULFATE (BARIUM SULFATE) **BM-2** | CAN TALC (TALC) **BM-1** | CAN XYLENES (XYLENES) **BM-1** | MAM | SKI | END | MUL | REP TITANIUM DIOXIDE (TITANIUM DIOXIDE) **LT-1** | CAN | END AROMATIC NAPHTHA, TYPE 1 (AROMATIC NAPHTHA, TYPE 1) **LT-1** | CAN | GEN | MAM | MUL | END LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE) **LT-UNK** ISOBUTYL ALCOHOL (ISOBUTYL ALCOHOL) **BM-2** | SKI | EYE ETHYLBENZENE (ETHYLBENZENE) **BM-2** | MAM | CAN | REP | PHY PHENOLIC RESIN SOLIDS (PHENOLIC RESIN SOLIDS) **NoGS** QUARTZ (QUARTZ) **LT-1** | CAN CARBON BLACK (CARBON BLACK) **LT-1** | CAN TERLON (TERLON) **NoGS** FORMALDEHYDE, MELAMINE POLYMER, METHYLATED (FORMALDEHYDE, MELAMINE POLYMER, METHYLATED) **LT-UNK** PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (PMA) (PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (PMA)) **LT-UNK** N-BUTANOL (N-BUTANOL) **BM-2** | MAM | SKI | EYE METHYL ETHYL KETOXIME (METHYL ETHYL KETOXIME) **LT-1** | MAM | CAN | EYE | SKI FERRIC OXIDE (DIIRON TRIOXIDE) **BM-2** | CAN DOLOMITE (DOLOMITE) **NoGS** ZINC OXIDE (ZINC OXIDE) **BM-1** | AQU | RES | MUL] **BASE COAT** [BARIUM SULFATE (BARIUM SULFATE) **BM-2** | CAN TALC (TALC) **BM-1** | CAN XYLENES (XYLENES) **BM-1** | MAM | SKI | END | MUL | REP AROMATIC NAPHTHA, TYPE 1 (AROMATIC NAPHTHA, TYPE 1) **LT-1** | CAN | GEN | MAM | MUL | END FERRIC OXIDE (DIIRON TRIOXIDE) **BM-2** | CAN LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE) **LT-UNK** LEAD OXIDE SULFATE (PB4O3(SO4)) (LEAD OXIDE SULFATE (PB4O3(SO4))) **LT-1** | MAM | AQU | DEL | REP | CAN | PBT | MUL | GEN ISOBUTYL ALCOHOL (ISOBUTYL ALCOHOL) **BM-2** | SKI | EYE 1,2,4-TRIMETHYLBENZENE (1,2,4-TRIMETHYLBENZENE) **BM-2** | MAM | EYE | SKI | AQU | MUL ETHYLBENZENE (ETHYLBENZENE) **BM-2** | MAM | CAN | REP |

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:

This HPD has been prepared using the Nested Content Inventory. Float glass is a material with Special Conditions as per the HPDC and guidelines for reporting Special Conditions materials are still under development by HPDC. Walker Glass will update the HPD accordingly once these guidelines get published. Content Inventory ranges are explained by the variability in thickness of Acid-etched Mirrors from Walker. Substances present in Walker's Acid-etched Mirrors, as well as known residuals and impurities, have been disclosed at 1,000 ppm. More details about how residuals and impurities were considered available in the appropriate section.

PHY LEAD CYANAMIDATE (LEAD CYANAMIDATE) **LT-1** | MAM | AQU | DEL |
REP | CAN | PBT | MUL | GEN QUARTZ (QUARTZ) **LT-1** | CAN FATTY
ACIDS, C18, UNSATD., DIMERS, REACTION PRODUCTS WITH N,N-
DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE **NoGS** | | SKI
CUMENE (CUMENE) **LT-1** | AQU | CAN | MAM | END TERLON (TERLON)
NoGS FORMALDEHYDE, MELAMINE POLYMER, METHYLATED
(FORMALDEHYDE, MELAMINE POLYMER, METHYLATED) **LT-UNK** N-
BUTANOL (N-BUTANOL) **BM-2** | MAM | SKI | EYE METHYL ETHYL
KETOXIME (METHYL ETHYL KETOXIME) **LT-1** | MAM | CAN | EYE | SKI
LEAD OXIDE, RED (LEAD OXIDE, RED) **LT-1** | MAM | AQU | DEL | REP | CAN
| PBT | MUL | GEN DOLOMITE (DOLOMITE) **NoGS** BISPHENOL A-
EPICHLOROXYDRIN ACRYLATE (BISPHENOL A-EPICHLOROXYDRIN
ACRYLATE) **LT-UNK**] SILVERING [SILVER NITRATE (SILVER NITRATE) **LT-**
P1 | SKI | AQU | PHY | END | MUL CUPRIC SULFATE, 5-HYDRATE (CUPRIC
SULFATE, 5-HYDRATE) **LT-P1** | AQU | EYE TIN DICHLORIDE (TIN
DICHLORIDE) **LT-P1** | END | MUL HYDROCHLORIC ACID 31.45 % IN
AQUEOUS SOLUTION (HYDROCHLORIC ACID 31.45 % IN AQUEOUS
SOLUTION) **BM-2** | MAM | SKI | RES]

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: CDPH Standard Method V1.1 - N/A

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: 2017-08-10

PUBLISHED DATE: 2017-09-13

EXPIRY DATE: 2020-08-10

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, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

ACID-ETCHED GLASS

#: 97.4900 - 98.6400

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Walker confirms that there are no residuals or impurities remaining on the acid-etched glass surface following the etching process. Walker has three different suppliers of soda-lime glass and therefore there are several level of disclosure of residuals and impurities. Supplier #1 data: All glasses sold by this supplier are regularly analyzed with an elemental detection limit of 10 ppm or lower. Pb, Cr, As, Sb, V and Cd may rarely be present in float glass as trace level contaminants and are never present at greater than 20 ppm. Therefore they were not included in the HPD. Co, Se and Ni may be added to impart colour to some tinted glasses. Co is never present at greater than 300 ppm, Se is never present at more than 50 ppm (not disclosed), Ni is typically not present at greater than 200 ppm but may be 800 ppm in some specific dark grey products. - No statement regarding impurities for Supplier #2.

OTHER MATERIAL NOTES: The main material used for acid-etched mirrors is soda-lime glass. The composition disclosed below corresponds to an average and generic composition for soda-lime glass. Walker's Acid-etched Mirrors is available in several colors: Clear, bronze, grey, black, blue, ultra-clear, green, etc. Not all suppliers provide tinted glass. The following statements represent the information received from tinted glass suppliers. Supplier #1 statement: Co, Se and Ni may be added to impart colour to some tinted glasses. Co is never present at greater than 300 ppm, Se is never present at more than 50 ppm (not disclosed), Ni is typically not present at greater than 200 ppm but may be 800 ppm in some specific dark grey product. Supplier #2 statement: Tinted glasses are very similar in composition to clear glass with adjustments to trace elements for coloring purposes and sometimes accompanied by minor changes to the other components where necessary for proper melting.

SILICA, AMORPHOUS (SILICON DIOXIDE)

ID: 7631-86-9

#: 69.0000 - 74.0000

GS: LT-P1

RC: None

NANO: No

ROLE: Network former

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

Japan - GHS

Carcinogenicity - Category 1A

SUBSTANCE NOTES: Main ingredient. See Material Notes.

SODIUM OXIDE (SODIUM OXIDE)

ID: 1313-59-3

#: 12.0000 - 16.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Fluxing agent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

CALCIUM OXIDE (CALCIUM OXIDE)

ID: 1305-78-8

| | | | | |
|----------------------------|------------------|-----------------|-----------------|-------------------------------|
| #: 5.0000 - 12.0000 | GS: LT-P1 | RC: None | NANO: No | ROLE: Network modifier |
|----------------------------|------------------|-----------------|-----------------|-------------------------------|

| | |
|------------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| None Found | No warnings found on HPD Priority lists |

SUBSTANCE NOTES: See Material Notes.

MAGNESIUM OXIDE (MAGNESIUM OXIDE)

ID: 1309-48-4

| | | | | |
|---------------------------|-------------------|-----------------|-----------------|-------------------------------|
| #: 0.0000 - 6.0000 | GS: LT-UNK | RC: None | NANO: No | ROLE: Network modifier |
|---------------------------|-------------------|-----------------|-----------------|-------------------------------|

| | |
|------------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| None Found | No warnings found on HPD Priority lists |

SUBSTANCE NOTES: See Material Notes.

ALUMINUM OXIDE (ALUMINUM OXIDE)

ID: 1344-28-1

| | | | | |
|---------------------------|------------------|-----------------|-----------------|--|
| #: 0.0000 - 3.0000 | GS: LT-P1 | RC: None | NANO: No | ROLE: Durability/viscosity/workability enhancer |
|---------------------------|------------------|-----------------|-----------------|--|

| | |
|-------------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| RESPIRATORY | AOEC - Asthmagens Asthmagens (ARs) - sensitizer-induced - inhalable forms only |

SUBSTANCE NOTES: See Material Notes.

SODIUM SULFATE (SALT CAKE)

ID: 7757-82-6

| | | | | |
|---------------------------|-------------------|-----------------|-----------------|---------------------------|
| #: 0.0000 - 1.0000 | GS: LT-UNK | RC: None | NANO: No | ROLE: Fining agent |
|---------------------------|-------------------|-----------------|-----------------|---------------------------|

| | |
|------------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| None Found | No warnings found on HPD Priority lists |

SUBSTANCE NOTES: Trace element for supplier #1. Present in some glasses.

FERRIC OXIDE (DIIRON TRIOXIDE)

ID: 1309-37-1

| | | | | |
|---------------------------|-----------------|-----------------|-----------------|-----------------------------|
| #: 0.0000 - 1.0000 | GS: BM-2 | RC: None | NANO: No | ROLE: Coloring agent |
|---------------------------|-----------------|-----------------|-----------------|-----------------------------|

| | |
|----------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| CANCER | MAK Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: Trace element for supplier #1. Present in some glasses.

CARBON (COAL)

ID: 7440-44-0

| | | | | |
|---------------------------|-------------------|-----------------|-----------------|-----------------------------|
| %: 0.0000 - 1.0000 | GS: LT-UNK | RC: None | NANO: No | ROLE: Reducing agent |
|---------------------------|-------------------|-----------------|-----------------|-----------------------------|

| | |
|------------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| None Found | No warnings found on HPD Priority lists |

SUBSTANCE NOTES: Trace element for supplier #1. Present in some glasses.

COBALT COMPOUNDS (COBALT COMPOUNDS)ID: **Not registered**

| | | | | |
|---------------------------|-----------------|-----------------|-----------------|-----------------------------|
| %: 0.0000 - 0.0300 | GS: LT-1 | RC: None | NANO: No | ROLE: Coloring agent |
|---------------------------|-----------------|-----------------|-----------------|-----------------------------|

| | |
|---------------|--|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| RESPIRATORY | AOEC - Asthmagens Asthmagen (G) - generally accepted |
| CANCER | MAK Carcinogen Group 2 - Considered to be carcinogenic for man |
| RESPIRATORY | MAK Sensitizing Substance Sah - Danger of airway & skin sensitization |
| GENE MUTATION | MAK Germ Cell Mutagen 3a |

SUBSTANCE NOTES: Present in some tinted glasses for supplier #2.

NICKEL COMPOUNDS (NICKEL COMPOUNDS)ID: **Not registered**

| | | | | |
|---------------------------|-----------------|-----------------|-----------------|-----------------------------|
| %: 0.0000 - 0.0800 | GS: LT-1 | RC: None | NANO: No | ROLE: Coloring agent |
|---------------------------|-----------------|-----------------|-----------------|-----------------------------|

| | |
|-------------|--|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| CANCER | IARC Group 1 - Agent is Carcinogenic to humans |
| CANCER | CA EPA - Prop 65 Carcinogen |
| CANCER | US CDC - Occupational Carcinogens Occupational Carcinogen |
| RESPIRATORY | AOEC - Asthmagens Asthmagen (ARs) - sensitizer-induced - inhalable forms only |
| CANCER | MAK Carcinogen Group 1 - Substances that cause cancer in man |
| RESPIRATORY | MAK Sensitizing Substance Sah - Danger of airway & skin sensitization |

SUBSTANCE NOTES: Up to 800 ppm in dark grey glasses for supplier #2.

TOP COAT%: **0.6800 - 1.2500**HPD URL: **N/A**PRODUCT THRESHOLD: **1000 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: Top coat supplied by two suppliers. Chemical composition based on SDS and composition disclosure. Residuals and impurities were in both cases not identified.

OTHER MATERIAL NOTES: The composition is presented with ranges since the formulation varies from one supplier to another. Substances with ranges starting with 0% are not present in both formulations. Substances with ranges starting with a number other than 0% is present in both formulations.

BARIUM SULFATE (BARIUM SULFATE)

ID: 7727-43-7

#: **10.0000 - 20.0000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Filler**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
|----------|---|
| CANCER | MAK Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels |

SUBSTANCE NOTES: See Material Notes.

TALC (TALC)

ID: 14807-96-6

#: **10.0000 - 20.0000** GS: **BM-1** RC: **None** NANO: **No** ROLE: **Filler**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
|----------|---|
| CANCER | MAK Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: See Material Notes.

XYLENES (XYLENES)

ID: 1330-20-7

#: **5.0000 - 19.2000** GS: **BM-1** RC: **None** NANO: **No** ROLE: **Solvent**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
|-----------------|---|
| MAMMALIAN | EU - R-phrases R20 - Harmful by Inhalation (gas or vapor or dust/mist) |
| MAMMALIAN | EU - R-phrases R21 - Harmful in Contact with Skin |
| SKIN IRRITATION | EU - R-phrases R38 - Irritating to skin |
| 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 | Japan - GHS Toxic to reproduction - Category 1B |

SUBSTANCE NOTES: See Material Notes.

TITANIUM DIOXIDE (TITANIUM DIOXIDE)

ID: 13463-67-7

%: **1.0000 - 5.0000**

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Pigment**

| HAZARDS: | AGENCY(IES) WITH 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 |

SUBSTANCE NOTES: See Material Notes.

AROMATIC NAPHTHA, TYPE 1 (AROMATIC NAPHTHA, TYPE 1)

ID: **64742-95-6**

%: **0.1000 - 3.0000**

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **solvent**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|---------------|---|--|
| CANCER | EU - R-phrases | R45 - May cause cancer |
| GENE MUTATION | EU - R-phrases | R46 - May cause heritable genetic damage |
| 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 | Australia - GHS | H340 - May cause genetic defects |
| CANCER | Australia - GHS | H350 - May cause cancer |

SUBSTANCE NOTES: Light aromatic. See Material Notes.

LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)

ID: **1317-65-3**

#: 0.0000 - 20.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Filler

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

ISOBUTYL ALCOHOL (ISOBUTYL ALCOHOL)

ID: 78-83-1

#: 0.0000 - 8.3000

GS: BM-2

RC: None

NANO: No

ROLE: Additive

HAZARDS:

AGENCY(IES) WITH WARNINGS:

SKIN IRRITATION

EU - R-phrases

R38 - Irritating to skin

EYE IRRITATION

EU - R-phrases

R41 - Risk of serious damage to eyes

SKIN IRRITATION

EU - GHS (H-Statements)

H315 - Causes skin irritation

EYE IRRITATION

EU - GHS (H-Statements)

H318 - Causes serious eye damage

SUBSTANCE NOTES: See Material Notes.

ETHYLBENZENE (ETHYLBENZENE)

ID: 100-41-4

#: 0.0000 - 2.2000

GS: BM-2

RC: None

NANO: No

ROLE: solvent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN

EU - R-phrases

R20 - Harmful by Inhalation (gas or vapor or dust/mist)

CANCER

IARC

Group 2b - Possibly carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen

MAMMALIAN

EU - GHS (H-Statements)

H304 - May be fatal if swallowed and enters airways

CANCER

MAK

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

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H225 - Highly flammable liquid and vapour

SUBSTANCE NOTES: See Material Notes.

PHENOLIC RESIN SOLIDS (PHENOLIC RESIN SOLIDS)

ID: Not registered

#: 0.0000 - 5.0000

GS: NoGS

RC: None

NANO: No

ROLE: Additive

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

QUARTZ (QUARTZ)

ID: 14808-60-7

#: 0.0000 - 1.0000

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Filler**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|----------|-----------------------------------|---|
| CANCER | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CANCER | CA EPA - Prop 65 | Carcinogen - specific to chemical form or exposure route |
| CANCER | IARC | Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources |
| CANCER | US NIH - Report on Carcinogens | Known to be Human Carcinogen (respirable size - occupational setting) |
| CANCER | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| CANCER | New Zealand - GHS | 6.7A - Known or presumed human carcinogens |

SUBSTANCE NOTES: See Material Notes.

CARBON BLACK (CARBON BLACK)

ID: 1333-86-4

#: 0.0000 - 1.0000

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Pigment**

| HAZARDS: | AGENCY(IES) WITH 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 |
| CANCER | MAK | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: See Material Notes.

TERLON (TERLON)

ID: 63148-69-6

#: 0.0000 - 22.5000

GS: **NoGS**

RC: **None**

NANO: **No**

ROLE: **Binder**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|------------|---|--|
| None Found | No warnings found on HPD Priority lists | |

SUBSTANCE NOTES: Approximation for the generic "Alkyd resin". See Material Notes.

%: **0.0000 - 6.7000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Crosslinking agent**

HAZARDS: AGENCY(IES) WITH WARNINGS:
None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (PMA) (PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (PMA))

ID: 108-65-6

%: **0.0000 - 3.5000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Solvent**

HAZARDS: AGENCY(IES) WITH WARNINGS:
None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

N-BUTANOL (N-BUTANOL)

ID: 71-36-3

%: **0.0000 - 2.0000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Thinner**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|-----------------|----------------------------|--------------------------------------|
| MAMMALIAN | EU - R-phrases | R22 - Harmful if Swallowed |
| SKIN IRRITATION | EU - R-phrases | R38 - Irritating to skin |
| EYE IRRITATION | EU - R-phrases | R41 - Risk of serious damage to eyes |
| SKIN IRRITATION | EU - GHS (H-Statements) | H315 - Causes skin irritation |
| EYE IRRITATION | EU - GHS (H-Statements) | H318 - Causes serious eye damage |

SUBSTANCE NOTES: See Material Notes.

METHYL ETHYL KETOXIME (METHYL ETHYL KETOXIME)

ID: 96-29-7

%: **0.0000 - 0.1000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Anti-skinning agent**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|----------------|----------------------------|--|
| MAMMALIAN | EU - R-phrases | R21 - Harmful in Contact with Skin |
| CANCER | EU - R-phrases | R40 - Limited Evidence of Carcinogenic Effects |
| EYE IRRITATION | EU - R-phrases | R41 - Risk of serious damage to eyes |
| SKIN SENSITIZE | EU - R-phrases | R43 - May cause sensitization by skin contact |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |

| | | |
|----------------|-------------------------|--|
| EYE IRRITATION | EU - GHS (H-Statements) | H318 - Causes serious eye damage |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| CANCER | MAK | Carcinogen Group 2 - Considered to be carcinogenic for man |
| SKIN SENSITIZE | MAK | Sensitizing Substance Sh - Danger of skin sensitization |

SUBSTANCE NOTES: See Material Notes.

FERRIC OXIDE (DIIRON TRIOXIDE)

ID: 1309-37-1

| | | | | |
|--------------------|----------------------------|--|-----------------|----------------------|
| #: 0.0000 - 0.5000 | GS: BM-2 | RC: None | NANO: No | ROLE: Pigment |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| CANCER | MAK | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification | | |

SUBSTANCE NOTES: See Material Notes.

DOLOMITE (DOLOMITE)

ID: 16389-88-1

| | | | | |
|---------------------|---|-----------------|-----------------|-----------------------|
| #: 0.0000 - 11.2000 | GS: NoGS | RC: None | NANO: No | ROLE: Extender |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| None Found | No warnings found on HPD Priority lists | | | |

SUBSTANCE NOTES: See Material Notes.

ZINC OXIDE (ZINC OXIDE)

ID: 1314-13-2

| | | | | |
|--------------------|---|---|-----------------|----------------------|
| #: 0.0000 - 1.5000 | GS: BM-1 | RC: None | NANO: No | ROLE: Pigment |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| ACUTE AQUATIC | EU - R-phrases | R50 - Very Toxic to Aquatic Organisms | | |
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (ARs) - sensitizer-induced - inhalable forms only | | |
| 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 | | |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters | | |

SUBSTANCE NOTES: See Material Notes.

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Base coat supplied by two suppliers. Chemical composition based on SDS and composition disclosure. Residuals and impurities were in both cases not identified.

OTHER MATERIAL NOTES: The composition is presented with ranges since the formulation varies from one supplier to another. Substances with ranges starting with 0% are not present in both formulations. Substances with ranges starting with a number other than 0% is present in both formulations.

BARIUM SULFATE (BARIUM SULFATE)

ID: 7727-43-7

| | | | | |
|-----------------------------|----------------------------|--|-----------------|---------------------|
| #: 10.0000 - 20.0000 | GS: BM-2 | RC: None | NANO: No | ROLE: Filler |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| CANCER | MAK | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels | | |

SUBSTANCE NOTES: See Material Notes.

TALC (TALC)

ID: 14807-96-6

| | | | | |
|----------------------------|----------------------------|--|-----------------|---------------------|
| #: 5.0000 - 14.0000 | GS: BM-1 | RC: None | NANO: No | ROLE: Filler |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| CANCER | MAK | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification | | |

SUBSTANCE NOTES: See Material Notes.

XYLENES (XYLENES)

ID: 1330-20-7

| | | | | |
|----------------------------|---|---|-----------------|----------------------|
| #: 5.0000 - 18.0000 | GS: BM-1 | RC: None | NANO: No | ROLE: Solvent |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| MAMMALIAN | EU - R-phrases | R20 - Harmful by Inhalation (gas or vapor or dust/mist) | | |
| MAMMALIAN | EU - R-phrases | R21 - Harmful in Contact with Skin | | |
| SKIN IRRITATION | EU - R-phrases | R38 - Irritating to skin | | |
| 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 | Japan - GHS | Toxic to reproduction - Category 1B | | |

SUBSTANCE NOTES: See Material Notes.

AROMATIC NAPHTHA, TYPE 1 (AROMATIC NAPHTHA, TYPE 1)

ID: 64742-95-6

#: **5.0000 - 8.6000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Solvent**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|---------------|---|--|
| CANCER | EU - R-phrases | R45 - May cause cancer |
| GENE MUTATION | EU - R-phrases | R46 - May cause heritable genetic damage |
| 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 | Australia - GHS | H340 - May cause genetic defects |
| CANCER | Australia - GHS | H350 - May cause cancer |

SUBSTANCE NOTES: See Material Notes.

FERRIC OXIDE (DIIRON TRIOXIDE)

ID: 1309-37-1

#: **2.4000 - 10.0000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Pigment**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|----------|----------------------------|--|
| CANCER | MAK | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: See Material Notes.

LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)

ID: 1317-65-3

#: **0.0000 - 50.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Filler**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|------------|---|--|
| None Found | No warnings found on HPD Priority lists | |

LEAD OXIDE SULFATE (PB4O3(SO4)) (LEAD OXIDE SULFATE (PB4O3(SO4)))

ID: 12202-17-4

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | RC: None | NANO: No | ROLE: Pigment |
|---------------------------|---|---|-----------------|----------------------|
| %: 0.0000 - 5.0000 | GS: LT-1 | | | |
| MAMMALIAN | EU - R-phrases | R20 - Harmful by Inhalation (gas or vapor or dust/mist) | | |
| MAMMALIAN | EU - R-phrases | R22 - Harmful if Swallowed | | |
| ACUTE AQUATIC | EU - R-phrases | R50 - Very Toxic to Aquatic Organisms | | |
| DEVELOPMENTAL | EU - R-phrases | R61 - May cause harm to the unborn child | | |
| REPRODUCTIVE | EU - R-phrases | R62 - Possible risk of impaired fertility | | |
| DEVELOPMENTAL | G&L - Neurotoxic Chemicals | Developmental Neurotoxicant | | |
| CANCER | US EPA - IRIS Carcinogens | (1986) Group B2 - Probable human Carcinogen | | |
| CANCER | IARC | Group 2a - Agent is probably Carcinogenic to humans | | |
| CANCER | CA EPA - Prop 65 | Carcinogen | | |
| PBT | US EPA - Toxics Release Inventory PBTs | PBT | | |
| REPRODUCTIVE | EU - SVHC Authorisation List | Toxic to reproduction - Prioritized for listing | | |
| PBT | OR DEQ - Priority Persistent Pollutants | Priority Persistent Pollutant - Tier 1 | | |
| 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 | | |
| DEVELOPMENTAL | EU - GHS (H-Statements) | H360Df - May damage the unborn child. Suspected of damaging fertility | | |
| REPRODUCTIVE | EU - REACH Annex XVII CMRs | Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans | | |
| MULTIPLE | ChemSec - SIN List | CMR - Carcinogen, Mutagen &/or Reproductive Toxicant | | |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters | | |
| CANCER | MAK | Carcinogen Group 2 - Considered to be carcinogenic for man | | |
| REPRODUCTIVE | New Zealand - GHS | 6.8A - Known or presumed human reproductive or developmental toxicants | | |
| CANCER | Japan - GHS | Carcinogenicity - Category 1B | | |
| REPRODUCTIVE | Japan - GHS | Toxic to reproduction - Category 1A | | |
| GENE MUTATION | MAK | Germ Cell Mutagen 3a | | |
| REPRODUCTIVE | EU - Annex VI CMRs | Reproductive Toxicity - Category 1A | | |
| DEVELOPMENTAL | Australia - GHS | H360Df - May damage the unborn child. Suspected of damaging fertility | | |

SUBSTANCE NOTES: See Material Notes.

ISOBUTYL ALCOHOL (ISOBUTYL ALCOHOL)

ID: 78-83-1

#: **0.0000 - 4.8000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Additive**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|-----------------|----------------------------|--------------------------------------|
| SKIN IRRITATION | EU - R-phrases | R38 - Irritating to skin |
| EYE IRRITATION | EU - R-phrases | R41 - Risk of serious damage to eyes |
| SKIN IRRITATION | EU - GHS (H-Statements) | H315 - Causes skin irritation |
| EYE IRRITATION | EU - GHS (H-Statements) | H318 - Causes serious eye damage |

SUBSTANCE NOTES: See Material Notes.

1,2,4-TRIMETHYLBENZENE (1,2,4-TRIMETHYLBENZENE)

ID: 95-63-6

#: **0.0000 - 3.8000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Thinner**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|-----------------|---|---|
| MAMMALIAN | EU - R-phrases | R20 - Harmful by Inhalation (gas or vapor or dust/mist) |
| EYE IRRITATION | EU - R-phrases | R36 - Irritating to eyes |
| SKIN IRRITATION | EU - R-phrases | R38 - Irritating to skin |
| ACUTE AQUATIC | EU - R-phrases | R51 - Toxic to Aquatic Organisms |
| 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: See Material Notes.

ETHYLBENZENE (ETHYLBENZENE)

ID: 100-41-4

#: **0.0000 - 2.1000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Solvent**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|-----------|----------------------------|---|
| MAMMALIAN | EU - R-phrases | R20 - Harmful by Inhalation (gas or vapor or dust/mist) |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| MAMMALIAN | EU - GHS (H-Statements) | H304 - May be fatal if swallowed and enters airways |

| | | |
|----------------------------|-------------------------|--|
| CANCER | MAK | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels |
| REPRODUCTIVE | Japan - GHS | Toxic to reproduction - Category 1B |
| PHYSICAL HAZARD (REACTIVE) | EU - GHS (H-Statements) | H225 - Highly flammable liquid and vapour |

SUBSTANCE NOTES: See Material Notes.

LEAD CYANAMIDATE (LEAD CYANAMIDATE)

ID: 20837-86-9

| %: 0.0000 - 1.0000 | GS: LT-1 | RC: None | NANO: No | ROLE: Pigment |
|---------------------------|---|-----------------|---|----------------------|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| MAMMALIAN | EU - R-phrases | | R20 - Harmful by Inhalation (gas or vapor or dust/mist) | |
| MAMMALIAN | EU - R-phrases | | R22 - Harmful if Swallowed | |
| ACUTE AQUATIC | EU - R-phrases | | R50 - Very Toxic to Aquatic Organisms | |
| DEVELOPMENTAL | EU - R-phrases | | R61 - May cause harm to the unborn child | |
| REPRODUCTIVE | EU - R-phrases | | R62 - Possible risk of impaired fertility | |
| DEVELOPMENTAL | G&L - Neurotoxic Chemicals | | Developmental Neurotoxicant | |
| CANCER | US EPA - IRIS Carcinogens | | (1986) Group B2 - Probable human Carcinogen | |
| CANCER | IARC | | Group 2a - Agent is probably Carcinogenic to humans | |
| CANCER | CA EPA - Prop 65 | | Carcinogen | |
| PBT | US EPA - Toxics Release Inventory PBTs | | PBT | |
| REPRODUCTIVE | EU - SVHC Authorisation List | | Toxic to reproduction - Candidate list | |
| PBT | OR DEQ - Priority Persistent Pollutants | | Priority Persistent Pollutant - Tier 1 | |
| 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 | |
| DEVELOPMENTAL | EU - GHS (H-Statements) | | H360Df - May damage the unborn child. Suspected of damaging fertility | |
| REPRODUCTIVE | EU - REACH Annex XVII CMRs | | Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans | |
| MULTIPLE | ChemSec - SIN List | | CMR - Carcinogen, Mutagen &/or Reproductive Toxicant | |
| MULTIPLE | German FEA - Substances Hazardous to Waters | | Class 3 - Severe Hazard to Waters | |
| CANCER | MAK | | Carcinogen Group 2 - Considered to be carcinogenic for man | |
| REPRODUCTIVE | Japan - GHS | | Toxic to reproduction - Category 1A | |
| GENE MUTATION | MAK | | Germ Cell Mutagen 3a | |
| REPRODUCTIVE | EU - Annex VI CMRs | | Reproductive Toxicity - Category 1A | |

QUARTZ (QUARTZ)

ID: 14808-60-7

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
|--------------------------------------|-----------------------------------|-----------------|---|----------------------|
| %: 0.0000 - 1.0000 | GS: LT-1 | RC: None | NANO: No | ROLE: Pigment |
| CANCER | US CDC - Occupational Carcinogens | | Occupational Carcinogen | |
| CANCER | CA EPA - Prop 65 | | Carcinogen - specific to chemical form or exposure route | |
| CANCER | IARC | | Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources | |
| CANCER | US NIH - Report on Carcinogens | | Known to be Human Carcinogen (respirable size - occupational setting) | |
| CANCER | MAK | | Carcinogen Group 1 - Substances that cause cancer in man | |
| CANCER | New Zealand - GHS | | 6.7A - Known or presumed human carcinogens | |
| SUBSTANCE NOTES: See Material Notes. | | | | |

FATTY ACIDS, C18, UNSATD., DIMERS, REACTION PRODUCTS WITH N,N-DIMETHYL-1,3-PROPANEDIAMINE AND 1,3-PROPANEDIAMINE

ID: 162627-17-0

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
|--------------------------------------|----------------------------|-----------------|--|-------------------------|
| %: 0.0000 - 1.0000 | GS: NoGS | RC: None | NANO: No | ROLE: Stabilizer |
| SKIN SENSITIZE | Japan - GHS | | Skin sensitizer - Category 1 | |
| SKIN SENSITIZE | Japan - GHS | | Skin sensitization - Category 1A | |
| SKIN SENSITIZE | Japan - GHS | | Skin sensitization - Category 1B | |
| SKIN IRRITATION | EU - GHS (H-Statements) | | H317 - May cause an allergic skin reaction | |
| SUBSTANCE NOTES: See Material Notes. | | | | |

CUMENE (CUMENE)

ID: 98-82-8

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
|---------------------------|--------------------------------|-----------------|--|----------------------|
| %: 0.0000 - 1.0000 | GS: LT-1 | RC: None | NANO: No | ROLE: Thinner |
| ACUTE AQUATIC | EU - R-phrases | | R51 - Toxic to Aquatic Organisms | |
| CANCER | IARC | | Group 2b - Possibly carcinogenic to humans | |
| CANCER | CA EPA - Prop 65 | | Carcinogen | |
| CANCER | US NIH - Report on Carcinogens | | Reasonably Anticipated to be Human Carcinogen | |
| CHRON AQUATIC | EU - GHS (H-Statements) | | H411 - Toxic to aquatic life with long lasting effects | |

| | | |
|-----------|---------------------------------------|--|
| 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 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: See Material Notes.

TERLON (TERLON)

ID: 63148-69-6

#: **0.0000 - 20.0000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Binder**

| | |
|------------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| None Found | No warnings found on HPD Priority lists |

SUBSTANCE NOTES: Approximation for unspecified generic "Alkyd resin". See Material Notes.

FORMALDEHYDE, MELAMINE POLYMER, METHYLATED (FORMALDEHYDE, MELAMINE POLYMER, METHYLATED)

ID: 68002-20-0

#: **0.0000 - 5.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Crosslinking agent**

| | |
|------------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: |
| None Found | No warnings found on HPD Priority lists |

SUBSTANCE NOTES: See Material Notes.

N-BUTANOL (N-BUTANOL)

ID: 71-36-3

#: **0.0000 - 5.0000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Thinner**

| | | |
|-----------------|----------------------------|--------------------------------------|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
| MAMMALIAN | EU - R-phrases | R22 - Harmful if Swallowed |
| SKIN IRRITATION | EU - R-phrases | R38 - Irritating to skin |
| EYE IRRITATION | EU - R-phrases | R41 - Risk of serious damage to eyes |
| SKIN IRRITATION | EU - GHS (H-Statements) | H315 - Causes skin irritation |
| EYE IRRITATION | EU - GHS (H-Statements) | H318 - Causes serious eye damage |

SUBSTANCE NOTES: See Material Notes.

METHYL ETHYL KETOXIME (METHYL ETHYL KETOXIME)

ID: 96-29-7

#: **0.0000 - 0.1000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Anti-skinning agent**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|----------------|----------------------------|--|
| MAMMALIAN | EU - R-phrases | R21 - Harmful in Contact with Skin |
| CANCER | EU - R-phrases | R40 - Limited Evidence of Carcinogenic Effects |
| EYE IRRITATION | EU - R-phrases | R41 - Risk of serious damage to eyes |
| SKIN SENSITIZE | EU - R-phrases | R43 - May cause sensitization by skin contact |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| EYE IRRITATION | EU - GHS (H-Statements) | H318 - Causes serious eye damage |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| CANCER | MAK | Carcinogen Group 2 - Considered to be carcinogenic for man |
| SKIN SENSITIZE | MAK | Sensitizing Substance Sh - Danger of skin sensitization |

SUBSTANCE NOTES: See Material Notes.

LEAD OXIDE, RED (LEAD OXIDE, RED)

ID: 1314-41-6

| #: 0.0000 - 5.1000 | GS: LT-1 | RC: None | NANO: No | ROLE: Pigment |
|--------------------|---|----------|----------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| MAMMALIAN | EU - R-phrases | | | R20 - Harmful by Inhalation (gas or vapor or dust/mist) |
| MAMMALIAN | EU - R-phrases | | | R22 - Harmful if Swallowed |
| ACUTE AQUATIC | EU - R-phrases | | | R50 - Very Toxic to Aquatic Organisms |
| DEVELOPMENTAL | EU - R-phrases | | | R61 - May cause harm to the unborn child |
| REPRODUCTIVE | EU - R-phrases | | | R62 - Possible risk of impaired fertility |
| DEVELOPMENTAL | G&L - Neurotoxic Chemicals | | | Developmental Neurotoxicant |
| CANCER | US EPA - IRIS Carcinogens | | | (1986) Group B2 - Probable human Carcinogen |
| CANCER | IARC | | | Group 2a - Agent is probably Carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | | | Carcinogen |
| PBT | US EPA - Toxics Release Inventory PBTs | | | PBT |
| REPRODUCTIVE | EU - SVHC Authorisation List | | | Toxic to reproduction - Prioritized for listing |
| PBT | OR DEQ - Priority Persistent Pollutants | | | Priority Persistent Pollutant - Tier 1 |
| 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 |
| DEVELOPMENTAL | EU - GHS (H-Statements) | | | H360Df - May damage the unborn child. Suspected of damaging fertility |
| REPRODUCTIVE | EU - REACH Annex XVII CMRs | | | Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans |

| | | |
|---------------|---|--|
| MULTIPLE | ChemSec - SIN List | CMR - Carcinogen, Mutagen &/or Reproductive Toxicant |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters |
| CANCER | MAK | Carcinogen Group 2 - Considered to be carcinogenic for man |
| REPRODUCTIVE | New Zealand - GHS | 6.8A - Known or presumed human reproductive or developmental toxicants |
| REPRODUCTIVE | Japan - GHS | Toxic to reproduction - Category 1A |
| GENE MUTATION | MAK | Germ Cell Mutagen 3a |
| REPRODUCTIVE | EU - Annex VI CMRs | Reproductive Toxicity - Category 1A |
| DEVELOPMENTAL | Australia - GHS | H360Df - May damage the unborn child. Suspected of damaging fertility |

SUBSTANCE NOTES: See Material Notes.

DOLOMITE (DOLOMITE)

ID: 16389-88-1

#: 0.0000 - 8.6000 GS: NoGS RC: None NANO: No ROLE: Extender

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

BISPHENOL A-EPICHLOROHYDRIN ACRYLATE (BISPHENOL A-EPICHLOROHYDRIN ACRYLATE)

ID: 55818-57-0

#: 0.0000 - 1.1000 GS: LT-UNK RC: None NANO: No ROLE: Binder

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

SILVERING

#: 0.0000 - 0.0200

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals analyzed and characterized by Walker.

OTHER MATERIAL NOTES: Substances left on mirrors following the silvering process.

SILVER NITRATE (SILVER NITRATE)

ID: 7761-88-8

#: 50.0000 GS: LT-P1 RC: None NANO: No ROLE: Product of silvering process

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|----------------------------|---|---|
| SKIN IRRITATION | EU - R-phrases | R34 - Causes burns |
| ACUTE AQUATIC | EU - R-phrases | R50 - Very Toxic to Aquatic Organisms |
| 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) | H272 - May intensify fire; oxidiser |
| SKIN IRRITATION | EU - GHS (H-Statements) | H314 - Causes severe skin burns and eye damage |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters |

SUBSTANCE NOTES: See Material Notes.

CUPRIC SULFATE, 5-HYDRATE (CUPRIC SULFATE, 5-HYDRATE)

ID: 7758-99-8

#: **50.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Product of silvering process**

| HAZARDS: | AGENCY(IES) WITH 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 |
| EYE IRRITATION | EU - GHS (H-Statements) | H318 - Causes serious eye damage |

SUBSTANCE NOTES: See Material Notes.

TIN DICHLORIDE (TIN DICHLORIDE)

ID: 7772-99-8

#: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|-----------|---|-----------------------------------|
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters |

SUBSTANCE NOTES: Residual from silvering process.

HYDROCHLORIC ACID 31.45 % IN AQUEOUS SOLUTION (HYDROCHLORIC ACID 31.45 % IN AQUEOUS SOLUTION)

ID: 7647-01-0

#: **Impurity/Residual** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

| HAZARDS: | AGENCY(IES) WITH WARNINGS: | |
|-----------|----------------------------|--|
| MAMMALIAN | EU - R-phrases | R23 - Toxic by Inhalation (gas, vapour, dust/mist) |

| | | |
|-----------------|---|--|
| SKIN IRRITATION | EU - R-phrases | R35 - Causes severe burns |
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rr) - irritant-induced |
| SKIN IRRITATION | EU - GHS (H-Statements) | H314 - Causes severe skin burns and eye damage |
| MAMMALIAN | EU - GHS (H-Statements) | H331 - Toxic if inhaled |
| MAMMALIAN | US EPA - EPCRA Extremely Hazardous Substances | Extremely Hazardous Substances |

SUBSTANCE NOTES: Residual from silvering process.

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

CDPH Standard Method V1.1 - N/A

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2017-08-

EXPIRY DATE:

CERTIFIER OR LAB: N/A

APPLICABLE FACILITIES: N/A

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CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: If the current version of the CDPH Standard Method does not provide an appropriate emissions scenario for the product type, and the product type cannot be tested using applicable CDPH Standard Method provisions for adapting the scenarios, "N/A" must be indicated. Note that there is no emissions scenario for exterior products.

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

Residuals and impurities were partially considered since not all suppliers had the same amount of disclosure in their documentation. Information about residuals and impurities came from documents provided by Walker's suppliers. Additional details are provided in Residuals / Impurities Notes.

MANUFACTURER INFORMATION

MANUFACTURER: **Walker Glass Company Ltd.**

ADDRESS: **9551 Ray Lawson Blvd**

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WEBSITE: **www.walkerglass.com**

CONTACT NAME: **Vince Grippo**

TITLE: **Research and Development Director**

PHONE: **514 352 3030**

EMAIL: **vince@walkerglass.com**

KEY

OSHA MSDS

Occupational Safety and Health Administration Material Safety Data Sheet

GHS SDS

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

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity

END Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

MAM Mammalian/systemic/organ toxicity

MUL Multiple hazards

NEU Neurotoxicity

OZO Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)

REP Reproductive toxicity

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

LAN Land Toxicity

NF Not found on Priority Hazard Lists

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 (insufficient data to benchmark)

LT-P1 List Translator Possible Benchmark 1

LT-1 List Translator Likely Benchmark 1

LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)

PostC Postconsumer

Both Both Preconsumer and Postconsumer

Unk Inclusion of recycled content is unknown

None Does not include recycled content

Other Terms

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.