Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- ○ Nested Materials Method
- ◉ Basic Method

Threshold Disclosed Per

- ○ Material
- ◉ Product

Threshold level

- ○ 100 ppm
- ◉ 1,000 ppm
- ○ Per GHS SDS
- ○ Per OSHA MSDS
- ○ Other

Residuals/Impurities

- ○ Considered
- ◉ Partially Considered
- ○ Not Considered

Explanation(s) provided for Residuals/Impurities?

- ◉ Yes ○ No

Are All Substances Above the Threshold Indicated:

Characterized
Percent Weight and Role Provided? ◉ Yes ○ No

Screened
Using Priority Hazard Lists with Results Disclosed? ◉ Yes ○ No

Identified
Name and Identifier Provided? ○ Yes ◉ No

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

STONSHIELD UTS [QUARTZ LT-1 | CAN PORTLAND CEMENT LT-P1 | END | CAN POLYMERIC MDI (PMDI) LT-UNK | RES | MUL | CAN METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) LT-UNK | MAM | EYE | SKI | CAN | RES | MUL TETRAETHYL N,N'-(METHYLENEDICYCLOHEXANE-4,1-DIYL)BIS-DL-ASPARTATE LT-UNK | SKI | AQU HEXAMETHYLENE DIISOCYANATE HOMOPOLYMER (HDI HOMOPOLYMER) LT-P1 FIBER GLASS, BIOINSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT >18 % BY WEIGHT LT-UNK | CAN CALCIUM MAGNESIUM HYDROXIDE NoGS C9-11-BRANCHED ALKYL BENZOATE NoGS CASTOR OIL NoGS 1,3,3-TRIMETHYL-N-(2-METHYLPROPYLIDENE)-5-[(2-METHYLPROPYLIDENE)AMINO]CYCLOHEXANEMETHYLAMINE LT-UNK DIPROPYLENE GLYCOL DIMETHYL ETHER LT-UNK BARIUM SULFATE BM-2 | CAN WATER BM-4 TITANIUM DIOXIDE LT-1 | CAN | END DIPROPYLENE GLYCOL DIBENZOATE LT-P1 | MUL 2-BUTENEDIOIC ACID (E)-, DIETHYL ESTER LT-UNK *ALUMINUM CALCIUM IRON OXIDE* NoGS *ALUMINUM OXIDE* LT-P1 | RES *ALUMINUM COMPOUNDS* LT-UNK | RES *BLAST FURNACE SLAG* LT-UNK *ALUMINOSILICATE* LT-UNK *CALCIUM OXIDE* LT-P1 *MAGNESIUM OXIDE* LT-UNK *FERRIC OXIDE* BM-2 | CAN *IRON OXIDES* LT-UNK | CAN *SILICA, AMORPHOUS* LT-P1 | CAN *AMORPHOUS SILICA SUBGROUPS LISTED BY MAK COMMISSION OF GERMANY* LT-UNK *SULFUR* LT-UNK | SKI *CALCIUM ALUMINATE* LT-UNK *CALCIUM CARBONATE* BM-3 *CALCIUM SULFATE DIHYDRATE* LT-UNK *DICALCIUM SILICATE* LT-UNK *FLY ASH* LT-UNK *ALUMINUM* LT-P1 | RES | PHY | END *ANTIMONY* LT-1 | MAM | AQU | CAN *ARSENIC* LT-1 | MAM | AQU | DEV | CAN | PBT | END | MUL | GEN *ARSENIC COMPOUNDS* LT-P1 | MAM | AQU | DEV | PBT *TOXIC HEAVY METALS* NoGS *ARSENIC COMPOUNDS, INORGANIC* LT-1 | MAM | AQU | DEV | CAN | PBT | GEN *LEAD* LT-1 | MAM | AQU | DEV | REP | CAN | PBT | MUL | END | GEN *LEAD COMPOUNDS* LT-1 | MAM | AQU | DEV | REP | CAN | PBT *LEAD COMPOUNDS, INORGANIC* LT-1 | MAM | AQU | DEV | REP | CAN | PBT | GEN *SODIUM CARBONATE* LT-P1 | EYE *SODIUM HYDROXIDE* LT-P1 | SKI | PHY *SODIUM NITRATE* LT-P1 | END *SODIUM SULFATE* LT-UNK *ANTIMONY COMPOUNDS* LT-P1 | MAM | AQU *ANTIMONY COMPOUNDS, INORGANIC* LT-1 | MAM | AQU | CAN *BARIUM* LT-P1 | END *BARIUM COMPOUNDS* LT-UNK *BENZO[G,H,I]PERYLENE* LT-1 | PBT | CAN *POLYCYCLIC AROMATIC HYDROCARBONS (PAH)* LT-1 | PBT | CAN *POLYCYCLIC AROMATIC COMPOUNDS - COMPOUND GROUP* NoGS *BORON* LT-UNK *BORON COMPOUNDS* LT-UNK *BROMINE* LT-P1 | MAM | SKI | AQU | MUL *CADMIUM* LT-1 | MAM | CAN | AQU | REP | DEV | PBT |

Number of Greenscreen BM-4/BM3 contents..... 2
Contents highest concern GreenScreen Benchmark or List translator Score..... LT-1
Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

N/A

GEN | PHY | MUL | END *CADMIUM COMPOUNDS* LT-1 | CAN | PBT | AQU *CADMIUM COMPOUNDS, INORGANIC* LT-1 | CAN | PBT | AQU | GEN *CARBON* LT-UNK *CESIUM* LT-UNK *CHROMIUM* LT-P1 | RES | END *COBALT* LT-1 | RES | SKI | CAN | MUL | GEN *BUTOXYPROPANOL* LT-UNK | EYE | SKI *1-PROPANOL-2-BUTOXY* NoGS *PROPYLENE GLYCOL & GLYCOL ETHERS (PGES)* NoGS *COBALT COMPOUNDS* LT-1 | RES | CAN | GEN *MAGNESIUM* LT-UNK | PHY *MANGANESE* LT-P1 | END | MUL | REP *MERCURY* LT-1 | MAM | AQU | DEV | PBT | REP | MUL | END | CAN | SKI *MERCURY COMPOUNDS* LT-1 | DEV | PBT *MERCURY COMPOUNDS, INORGANIC* LT-1 | MAM | AQU | DEV | PBT | CAN | SKI *MOLYBDENUM* LT-UNK *NICKEL* LT-1 | MAM | CAN | SKI | AQU | RES | MUL *NICKEL COMPOUNDS* LT-1 | CAN | RES *POLYCYCLIC AROMATIC COMPOUNDS* LT-1 | CAN | PBT | AQU | GEN | REP | MUL *PITCHES, COAL TAR* NoGS *POTASSIUM* LT-P1 | SKI | PHY *QUARTZ* LT-1 | CAN *CRYSTALLINE SILICAS - RESPIRABLE* LT-1 | CAN *SELENIUM* LT-P1 | MAM | AQU | PBT | MUL | CAN *SULFURIC ACID* LT-P1 | SKI | RES | CAN | MAM | PHY *SELENIUM COMPOUNDS* LT-P1 | MAM | AQU | PBT *SILICA, CHRISTOBALITE* LT-1 | CAN *SODIUM MONOXIDE* LT-UNK *STRONTIUM* LT-UNK *SULFUR TRIOXIDE* LT-P1 | MAM *THALLIUM* LT-P1 | MAM | GEN | REP *TITANIUM DIOXIDE* LT-1 | CAN | END *TITANIUM DIOXIDE COMPOUNDS* LT-1 | CAN *VANADIUM* LT-1 | MUL | CAN | GEN *TRICALCIUM SILICATE* LT-UNK *1,6-HEXAMETHYLENE DIISOCYANATE* LT-UNK | MAM | EYE | SKI | RES *ISOCYANATES* NoGS *POLYISOCYANATE COMPOUNDS* NoGS *STANNOUS OCTOATE* LT-P1 | MUL *2-ETHYLHEXANOIC ACID* LT-P1 | DEV | END | REP *TIN DICHLORIDE* LT-P1 | END | MUL *1,2-PROPANEDIOL DIBENZOATE* LT-UNK *DIPROPYLENE GLYCOL MONOBENZOATE* NoGS *PROPENYLOXY PROPYL BENZOATE* NoGS *PROPYLENE GLYCOL MONOBENZOATE* NoGS]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 13 Regulatory (g/l): 13
Does the product contain exempt VOCs: No
Are ultra-low VOC tints available: Yes

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

VOC emissions: CDPH Standard Method V1.1 (Section 01350/CHPS) - Classroom & Office scenario

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2017-09-18
PUBLISHED DATE: 2017-09-18
EXPIRY DATE: 2020-09-18

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

STONSHIELD UTS

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Partially

RESIDUALS AND IMPURITIES NOTES: Residuals are considered and included only when above the reported threshold.

OTHER PRODUCT NOTES:

QUARTZ

ID: **14808-60-7**

%: **63.3200 - 63.3200** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Filler/Aggregate**

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
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES:

PORTLAND CEMENT

ID: **65997-15-1**

%: **12.2800 - 12.2800** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Filler/Aggregate**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES:

POLYMERIC MDI (PMDI)

ID: **9016-87-9**

%: **5.4100 - 5.4100** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Reactive Isocyanates**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES:

METHYLENE BISPHENYL DIISOCYANATE (PURE MDI)

ID: **101-68-8**

%: **3.6100 - 3.6100** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Reactive Isocyanates**

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
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
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
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES:

TETRAETHYL N,N'-(METHYLENEDICYCLOHEXANE-4,1-DIYL)BIS-DL-ASPARTATE

ID: **136210-30-5**

%: **3.4900 - 3.4900** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Reactive Resin**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
ACUTE AQUATIC	EU - R-phrases	R52 - Harmful to Aquatic Organisms
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

HEXAMETHYLENE DIISOCYANATE HOMOPOLYMER (HDI HOMOPOLYMER)

ID: **28182-81-2**

%: **3.4300 - 3.4300** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Reactive Isocyanates**

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

SUBSTANCE NOTES:

FIBER GLASS, BIOINSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT >18 % BY WEIGHT

ID: **65997-17-3**

%: **2.0700 - 2.0700** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Filler**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer

SUBSTANCE NOTES:

CALCIUM MAGNESIUM HYDROXIDE

ID: **39445-23-3**

%: **1.2300 - 1.2300** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Filler**

HAZARDS:	AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES:

C9-11-BRANCHED ALKYL BENZOATE

ID: **131298-44-7**

%: **1.2100 - 1.2100** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Plasticizer**

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

SUBSTANCE NOTES:

CASTOR OIL

ID: **8001-79-4**

%: **0.8400 - 0.8400** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Reactive Resin**

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

SUBSTANCE NOTES:

1,3,3-TRIMETHYL-N-(2-METHYLPROPYLIDENE)-5-[(2-METHYLPROPYLIDENE)AMINO]CYCLOHEXANEMETHYLAMINE

ID: **54914-37-3**

%: **0.6400 - 0.6400** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Reactive Amine**

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

SUBSTANCE NOTES:

DIPROPYLENE GLYCOL DIMETHYL ETHER

ID: **111109-77-4**

%: **0.5900 - 0.5900** 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:

BARIUM SULFATE

ID: **7727-43-7**

%: **0.4600 - 0.4600** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS: AGENCY(IES) WITH WARNINGS:

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

SUBSTANCE NOTES:

WATER

ID: **7732-18-5**

%: **0.4200 - 0.4200** GS: **BM-4** RC: **None** NANO: **No** ROLE: **Water**

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

SUBSTANCE NOTES:

TITANIUM DIOXIDE

ID: **13463-67-7**

%: **0.2600 - 0.2600** 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:

DIPROPYLENE GLYCOL DIBENZOATE

ID: **27138-31-4**

%: **0.2300 - 0.2300** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Plasticizer**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES:

2-BUTENEDIOIC ACID (E)-, DIETHYL ESTER

ID: **623-91-6**

%: **0.1800 - 0.1800** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Reactive Amine**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES:

ALUMINUM CALCIUM IRON OXIDE

ID: **12068-35-8**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ALUMINUM OXIDE

ID: **1344-28-1**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ALUMINUM COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BLAST FURNACE SLAG

ID: **65996-69-2**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ALUMINOSILICATE

ID: **1327-36-2**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CALCIUM OXIDE

ID: **1305-78-8**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

MAGNESIUM OXIDE

ID: **1309-48-4**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

FERRIC OXIDE

ID: **1309-37-1**

%: **Impurity/Residual** GS: **BM-2** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

IRON OXIDES

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SILICA, AMORPHOUS

ID: **7631-86-9**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	Japan - GHS	Carcinogenicity - Category 1A

SUBSTANCE NOTES: Imported from Pharos process chemistry research

AMORPHOUS SILICA SUBGROUPS LISTED BY MAK COMMISSION OF GERMANY

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SULFUR

ID: **7704-34-9**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CALCIUM ALUMINATE

ID: **12042-78-3**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CALCIUM CARBONATE

ID: **471-34-1**

%: **Impurity/Residual** GS: **BM-3** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CALCIUM SULFATE DIHYDRATE

ID: **10101-41-4**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

DICALCIUM SILICATE

ID: **10034-77-2**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

FLY ASH

ID: **69012-84-6**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ALUMINUM

ID: **7429-90-5**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ANTIMONY

ID: **7440-36-0**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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	R51 - Toxic to Aquatic Organisms
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ARSENIC

ID: **7440-38-2**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CANCER	US EPA - IRIS Carcinogens	(1986) Group A - Human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
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	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A

GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ARSENIC COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled

SUBSTANCE NOTES: Imported from Pharos process chemistry research

TOXIC HEAVY METALS

ID: **Not registered**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ARSENIC COMPOUNDS, INORGANIC

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant

CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
GENE MUTATION	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: Imported from Pharos process chemistry research

LEAD

ID: **7439-92-1**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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	IARC	Group 2B - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (PPT)	Priority PBT

PBT	US EPA - Toxics Release Inventory PBTs	PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REPRODUCTIVE	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
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 - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
DEVELOPMENTAL	EU - GHS (H-Statements)	H362 - May cause harm to breast-fed children
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
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

LEAD COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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	CA EPA - Prop 65	Carcinogen

PBT	US EPA - Toxics Release Inventory PBTs	PBT
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
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A

SUBSTANCE NOTES: Imported from Pharos process chemistry research

LEAD COMPOUNDS, INORGANIC

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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
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
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GENE MUTATION	MAK	Germ Cell Mutagen 3a
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SODIUM CARBONATE

ID: **497-19-8**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SODIUM HYDROXIDE

ID: **1310-73-2**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN IRRITATION	EU - R-phrases	R35 - Causes severe burns
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
PHYSICAL HAZARD (REACTIVE)	Korea - GHS	H290: May be corrosive to metals

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SODIUM NITRATE

ID: **7631-99-4**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SODIUM SULFATE

ID: **7757-82-6**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ANTIMONY COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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	R51 - Toxic to Aquatic Organisms
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ANTIMONY COMPOUNDS, INORGANIC

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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	R51 - Toxic to Aquatic Organisms
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BARIUM

ID: **7440-39-3**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BARIUM COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BENZO[G,H,I]PERYLENE

ID: **191-24-2**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
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 - Substance of Possible Concern
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1

SUBSTANCE NOTES: Imported from Pharos process chemistry research

POLYCYCLIC AROMATIC HYDROCARBONS (PAH)

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
PBT	WA DoE - PBT	PBT
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action

SUBSTANCE NOTES: Imported from Pharos process chemistry research

POLYCYCLIC AROMATIC COMPOUNDS - COMPOUND GROUP

ID: **Not registered**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BORON

ID: **7440-42-8**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BORON COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

BROMINE

ID: **7726-95-6**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
SKIN IRRITATION	EU - R-phrases	R35 - Causes severe burns
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CADMIUM

ID: **7440-43-9**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
CANCER	EU - R-phrases	R45 - May cause cancer

ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
REPRODUCTIVE	EU - R-phrases	R62 - Possible risk of impaired fertility
DEVELOPMENTAL	EU - R-phrases	R63 - Possible risk of harm to the unborn child
CANCER	US EPA - IRIS Carcinogens	(1986) Group B1 - Probable human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
GENE MUTATION	EU - R-phrases	R68 - May cause irreversible effects
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CANCER	EU - SVHC Authorisation List	Carcinogenic - Candidate list
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
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
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
GENE MUTATION	EU - GHS (H-Statements)	H341 - Suspected of causing genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
REPRODUCTIVE	EU - GHS (H-Statements)	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic 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	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on

		animal evidence
GENE MUTATION	New Zealand - GHS	6.6A - Known or presumed human mutagens
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Malaysia - GHS	H350 - May cause cancer
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CADMIUM COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
PBT	WA DoE - PBT	PBT
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CADMIUM COMPOUNDS, INORGANIC

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
PBT	WA DoE - PBT	PBT
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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

CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
GENE MUTATION	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CARBON

ID: **7440-44-0**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CESIUM

ID: **7440-46-2**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CHROMIUM

ID: **7440-47-3**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Imported from Pharos process chemistry research

COBALT

ID: **7440-48-4**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
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
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
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: Imported from Pharos process chemistry research

BUTOXYPROPANOL

ID: **5131-66-8**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation

SUBSTANCE NOTES: Imported from Pharos process chemistry research

1-PROPANOL-2-BUTOXY

ID: **15821-83-7**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

PROPYLENE GLYCOL & GLYCOL ETHERS (PGES)

ID: **111-46-6**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

COBALT COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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: Imported from Pharos process chemistry research

MAGNESIUM

ID: **7439-95-4**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH 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: Imported from Pharos process chemistry research

MANGANESE

ID: **7439-96-5**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** 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 2 - Hazard to Waters
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Imported from Pharos process chemistry research

MERCURY

ID: **7439-97-6**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
MAMMALIAN	EU - R-phrases	R27 - Very Toxic in Contact with Skin
MAMMALIAN	EU - R-phrases	R28 - Very Toxic if Swallowed
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
DEVELOPMENTAL	EU - R-phrases	R61 - May cause harm to the unborn child
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	US EPA - Priority PBTs (PPT)	Priority PBT
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
MAMMALIAN	EU - GHS (H-Statements)	H300 - Fatal if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H310 - Fatal in contact with skin
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
DEVELOPMENTAL	EU - GHS (H-Statements)	H360D - 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	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
REPRODUCTIVE	Korea - GHS	Reproductive toxicity - Category 1 [H360 - May damage fertility or the unborn child]
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B

DEVELOPMENTAL	Malaysia - GHS	H360D - May damage the unborn child
DEVELOPMENTAL	Australia - GHS	H360D - May damage the unborn child

SUBSTANCE NOTES: Imported from Pharos process chemistry research

MERCURY COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Toxics Release Inventory PBTs	PBT

SUBSTANCE NOTES: Imported from Pharos process chemistry research

MERCURY COMPOUNDS, INORGANIC

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
MAMMALIAN	EU - R-phrases	R27 - Very Toxic in Contact with Skin
MAMMALIAN	EU - R-phrases	R28 - Very Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Toxics Release Inventory PBTs	PBT
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
MAMMALIAN	EU - GHS (H-Statements)	H300 - Fatal if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H310 - Fatal in contact with skin
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Imported from Pharos process chemistry research

MOLYBDENUM

ID: **7439-98-7**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

NICKEL

ID: **7440-02-0**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
ACUTE AQUATIC	EU - R-phrases	R52 - Harmful to Aquatic Organisms
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2B - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Imported from Pharos process chemistry research

NICKEL COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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: Imported from Pharos process chemistry research

POLYCYCLIC AROMATIC COMPOUNDS

ID: **65996-93-2**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	EU - R-phrases	R45 - May cause cancer
PBT	EU - ESIS PBT	PBT
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
PBT	US EPA - Toxics Release Inventory PBTs	PBT
CANCER	EU - SVHC Authorisation List	Carcinogenic - Prioritized for listing
CANCER	EU - SVHC Authorisation List	Carcinogenic - Banned unless Authorised
PBT	EU - SVHC Authorisation List	PBT - Prioritized for listing
PBT	EU - SVHC Authorisation List	PBT - Banned unless Authorised
PBT	EU - SVHC Authorisation List	vPvB - Prioritized for listing
PBT	EU - SVHC Authorisation List	vPvB - Banned unless Authorised
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life M = 1000
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
REPRODUCTIVE	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 1 - Substances known to be 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
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
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	EU - Annex VI CMRs	Carcinogen Category 1A - Known human Carcinogen based on human evidence
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
CANCER	Japan - GHS	Carcinogenicity - Category 1A
GENE MUTATION	Japan - GHS	Germ cell mutagenicity - Category 1B
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
GENE MUTATION	Australia - GHS	H340 - May cause genetic defects
CANCER	Australia - GHS	H350 - May cause cancer
REPRODUCTIVE	Australia - GHS	H360Fd - May damage fertility. Suspected of damaging the unborn child

SUBSTANCE NOTES: Imported from Pharos process chemistry research

PITCHES, COAL TAR

ID: **Not registered**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

POTASSIUM

ID: **7440-09-7**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN IRRITATION	EU - R-phrases	R34 - Causes burns
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage

SUBSTANCE NOTES: Imported from Pharos process chemistry research

QUARTZ

ID: **14808-60-7**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Imported from Pharos process chemistry research

CRYSTALLINE SILICAS - RESPIRABLE

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SELENIUM

ID: **7782-49-2**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms

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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SULFURIC ACID

ID: **7664-93-9**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
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
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
PHYSICAL HAZARD (REACTIVE)	Korea - GHS	H290: May be corrosive to metals

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SELENIUM COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed

MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SILICA, CHRISTOBALITE

ID: **14464-46-1**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SODIUM MONOXIDE

ID: **12401-86-4**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

STRONTIUM

ID: **7440-24-6**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

SULFUR TRIOXIDE

ID: **7446-11-9**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances

SUBSTANCE NOTES: Imported from Pharos process chemistry research

THALLIUM

ID: **7440-28-0**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
MAMMALIAN	EU - R-phrases	R28 - Very Toxic if Swallowed
MAMMALIAN	EU - GHS (H-Statements)	H300 - Fatal if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
GENE MUTATION	Japan - GHS	Germ cell mutagenicity - Category 1B
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A

SUBSTANCE NOTES: Imported from Pharos process chemistry research

TITANIUM DIOXIDE

ID: **13463-67-7**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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: Imported from Pharos process chemistry research

TITANIUM DIOXIDE COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

VANADIUM

ID: **7440-62-2**

%: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GENE MUTATION	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Imported from Pharos process chemistry research

TRICALCIUM SILICATE

ID: **12168-85-3**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

1,6-HEXAMETHYLENE DIISOCYANATE

ID: **822-06-0**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted

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
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Imported from Pharos process chemistry research

ISOCYANATES

ID: **Not registered**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

POLYISOCYANATE COMPOUNDS

ID: **Not registered**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

STANNOUS OCTOATE

ID: **301-10-0**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Imported from Pharos process chemistry research

2-ETHYLHEXANOIC ACID

ID: **149-57-5**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS: AGENCY(IES) WITH WARNINGS:

DEVELOPMENTAL	EU - R-phrases	R63 - Possible risk of harm to the unborn child
DEVELOPMENTAL	EU - GHS (H-Statements)	H361d - Suspected of damaging the unborn child
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Imported from Pharos process chemistry research

TIN DICHLORIDE

ID: **7772-99-8**

%: **Impurity/Residual** GS: **LT-P1** RC: **UNK** 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: Imported from Pharos process chemistry research

1,2-PROPANEDIOL DIBENZOATE

ID: **19224-26-1**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

DIPROPYLENE GLYCOL MONOBENZOATE

ID: **32686-95-6**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

PROPENYLOXY PROPYL BENZOATE

ID: **197178-94-2**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

PROPYLENE GLYCOL MONOBENZOATE ID: **37086-84-3**

%: **Impurity/Residual** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Imported from Pharos process chemistry research

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 (Section 01350/CHPS) - Classroom & Office scenario**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2017-09-15

EXPIRY DATE:

CERTIFIER OR LAB: Berkeley Analytical

CERTIFICATION AND COMPLIANCE NOTES: CDPH Certification for Stonshield UTS 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

N

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Stonhard**
ADDRESS: **1000 East Park Ave**
Maple Shade NJ 08052, USA
WEBSITE: **http://www.stonhard.com**

CONTACT NAME: **Mike Jewell**
TITLE: **VP Product Development**
PHONE: **856-779-7500**
EMAIL: **mjewell@stonhard.com**

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classi cation 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 Unspeci ed (insu cient 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 produc

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

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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.