

CLASSIFICATION: 09 67 23

PRODUCT DESCRIPTION: POLY-CRETE HF IS A 100% SOLIDS, AROMATIC, CEMENTITIOUS URETHANE CONCRETE COATING SYSTEM.

Section 1: Summary

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 and impurities considered in all 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 GREENSCREEN SCORE HAZARD TYPE;

QUARTZ LT - 1 CAN; **CEMENT DUST** LT - UNK CAN; **CASTOR OIL** LT - UNK ; **POLYMETHYLENE POLYPHENYL ISOCYANATE** LT - UNK CAN | RES | MUL; **4,4'-METHYLENEDIPHENYL DIISOCYANATE** LT - UNK CAN | EYE | SKI | RES | MAM | MUL; **BENZENE, 1,1'-METHYLENEBIS[ISOCYANATO-** LT - UNK CAN | RES | SKI | EYE | MAM | MUL; **DIHYDROGEN OXIDE** BM - 4 ; **BRANCHED C10-ALKYL BENZOATES** NOGS ; **CALCIUM CARBONATE** LT - UNK ; **GYPHUM** LT - UNK ; **CALCIUM HYDROXIDE (CA(OH)2)** LT - UNK ; **CALCIUM OXIDE** LT - UNK ; **ALUMINUM OXIDE** LT - 1 CAN | RES; **TITANIUM DIOXIDE** LT - 1 CAN; **DIETHYLENE GLYCOL** LT - UNK DEV | MAM; **MAGNESIUM OXIDE (MGO)** LT - UNK ; **POLY[OXY(METHYL-1,2-ETHANEDIYL)], A-HYDRO-Ω-HYDROXY-** LT - UNK ; **PROPANOIC ACID, 2-METHYL-, 2,2-DIMETHYL-1-(1-METHYLETHYL)-1,3-PROPANEDIYL ESTER** LT - P1 END; **ISOCYANIC ACID, POLYMETHYLENEPOLYPHENYLENE ESTER, POLYMER WITH A-HYDRO-Ω-HYDROXPOLY(OXY-1,2-ETHANEDIYL)** LT - UNK ; **POTASSIUM OXIDE (K2O)** LT - UNK ;

Number of GreenScreen® BM-4/BM-3 contents: 1

Contents highest concern GreenScreen® Benchmark or List Translator Score: LT - 1

Nanomaterial: No contents are characterized as a nanomaterial

INVENTORY AND SCREENING NOTES

This HPD was created with Basic Inventory.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 0

Regulatory (g/l): 0

Does the product contain exempt VOCs? No

Are ultra-low VOC tints available? Not Applicable

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings

CONSISTENCY WITH OTHER PROGRAMS

LEED v4 Material Ingredients Option 1.

Third Party Verified?

Yes

No

PREPARER:

VERIFIER:

VERIFICATION #:

SCREENING DATE: 8/16/2017

PUBLISHED DATE: 8/16/2017

EXPIRY DATE: 8/16/2020



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

DUR-A-FLEX - POLY-CRETE HF

PRODUCT THRESHOLD: 1,000ppm

RESIDUALS AND IMPURITIES CONSIDERED: Considered

RESIDUAL/IMPURITIES NOTES:

OTHER PRODUCT NOTES:

QUARTZ

ID: 14808-60-7

%: 65-75%

GS: LT - 1

RC: Unknown

NANO: No

ROLE: Resin

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CAN

MAK Carcinogen

Carc. 1

CAN

IARC

1

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

CEMENT DUST

ID: 65997-15-1

%: 10-15%

GS: LT - UNK

RC: None

NANO: No

ROLE: Aggregate

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CAN

MAK Carcinogen

Carc. 3B

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

CASTOR OIL

ID: 8001-79-4

%: 1-5%

GS: LT - UNK

RC: None

NANO: No

ROLE: Resin

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority Lists

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

POLYMETHYLENE POLYPHENYL ISOCYANATE

ID: 9016-87-9

%: 1-5%

GS: LT - UNK

RC: None

NANO: No

ROLE: Hardener

HAZARDS:

AGENCY(IES) WITH WARNINGS:

| | | | |
|-----|----------------------------------|--|---|
| CAN | MAK Carcinogen | | Carc. 4 |
| RES | AOEC - Asthmagens | | Rs |
| RES | AOEC - Asthmagens | | G |
| RES | MAK Sensitizing | | Sah |
| MUL | US EPA PPT Chemical Action Plans | | EPA Chemical of Concern - Action Plan published |

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

4,4'-METHYLENEDIPHENYL DIISOCYANATE

ID: 101-68-8

| | | | | |
|----------|----------------------------------|----------|---|----------------|
| %: 1-5% | GS: LT - UNK | RC: None | NANO: No | ROLE: Hardener |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| CAN | EU - Annex VI CMRs | | Carc. 2 | |
| CAN | MAK Carcinogen | | Carc. 4 | |
| EYE | EU - GHS (H-Statements) | | H319 | |
| SKI | EU - GHS (H-Statements) | | H315 | |
| RES | EU - GHS (H-Statements) | | H334 | |
| CAN | EU - GHS (H-Statements) | | H351 | |
| SKI | EU - GHS (H-Statements) | | H317 | |
| CAN | EU - R-Phrases | | 40 | |
| SKI | EU - R-Phrases | | 38 | |
| MAM | EU - R-Phrases | | 20 | |
| EYE | EU - R-Phrases | | 36 | |
| RES | EU - R-Phrases | | 42 | |
| SKI | EU - R-Phrases | | 43 | |
| CAN | EU - REACH Annex XVII CMRs | | Carc. Cat. 3 | |
| RES | AOEC - Asthmagens | | G | |
| RES | MAK Sensitizing | | Sah | |
| MUL | US EPA PPT Chemical Action Plans | | EPA Chemical of Concern - Action Plan published | |

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

BENZENE, 1,1'-METHYLENEBIS[ISOCYANATO-

ID: 26447-40-5

| | | | | |
|----------|----------------------------------|----------|---|----------------|
| %: 1-5% | GS: LT - UNK | RC: None | NANO: No | ROLE: Hardener |
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| CAN | EU - Annex VI CMRs | | Carc. 2 | |
| RES | EU - GHS (H-Statements) | | H334 | |
| SKI | EU - GHS (H-Statements) | | H317 | |
| CAN | EU - GHS (H-Statements) | | H351 | |
| SKI | EU - GHS (H-Statements) | | H315 | |
| EYE | EU - GHS (H-Statements) | | H319 | |
| MAM | EU - R-Phrases | | 20 | |
| CAN | EU - R-Phrases | | 40 | |
| EYE | EU - R-Phrases | | 36 | |
| RES | EU - R-Phrases | | 42 | |
| SKI | EU - R-Phrases | | 43 | |
| SKI | EU - R-Phrases | | 38 | |
| CAN | EU - REACH Annex XVII CMRs | | Carc. Cat. 3 | |
| MUL | US EPA PPT Chemical Action Plans | | EPA Chemical of Concern - Action Plan published | |

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

DIHYDROGEN OXIDE

ID: 7732-18-5

| | | | | |
|---------|------------|----------|----------|-------------|
| %: 1-5% | GS: BM - 4 | RC: None | NANO: No | ROLE: Resin |
|---------|------------|----------|----------|-------------|

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

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

BRANCHED C10-ALKYL BENZOATES

ID: 131298-44-7

%: 1-5% GS: NOGS RC: None NANO: No ROLE: Resin

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

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

CALCIUM CARBONATE

ID: 1317-65-3

%: 0.1-1% GS: LT - UNK RC: Unknown NANO: No ROLE: Resin

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

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

GYP SUM

ID: 13397-24-5

%: 0.1-1% GS: LT - UNK RC: None NANO: No ROLE: Aggregate

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

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

CALCIUM HYDROXIDE (CA(OH)2)

ID: 1305-62-0

%: 0.1-1% GS: LT - UNK RC: None NANO: No ROLE: Aggregate

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

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

CALCIUM OXIDE

ID: 1305-78-8

%: 0.1-1% GS: LT - UNK RC: None NANO: No ROLE: Aggregate

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

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

ALUMINUM OXIDE

ID: 1344-28-1

%: 0.1-1% GS: LT - 1 RC: None NANO: No ROLE: Aggregate

HAZARDS: AGENCY(IES) WITH WARNINGS:
CAN MAK Carcinogen Carc. 2
RES AOEC - Asthmagens Rs

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

TITANIUM DIOXIDE

ID: 13463-67-7

%: 0.1-1% GS: LT - 1 RC: None NANO: No ROLE: Resin

HAZARDS: AGENCY(IES) WITH WARNINGS:
CAN US CDC - Occupational Carcinogens Occupational Carcinogen
CAN MAK Carcinogen Carc. 3A
CAN IARC 2B

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

DIETHYLENE GLYCOL

ID: 111-46-6

%: 0.1-1% GS: LT - UNK RC: None NANO: No ROLE: Resin

HAZARDS: AGENCY(IES) WITH WARNINGS:

| | | |
|-----|----------------------------|---------------|
| DEV | G&L - Neurotoxic Chemicals | Neurotoxicity |
| MAM | EU - R-Phrases | 22 |

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

MAGNESIUM OXIDE (MGO)

ID: 1309-48-4

| | | | | |
|-----------|--------------|----------|----------|-----------------|
| %: 0.1-1% | GS: LT - UNK | RC: None | NANO: No | ROLE: Aggregate |
|-----------|--------------|----------|----------|-----------------|

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority Lists

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

POLY[OXY(METHYL-1,2-ETHANEDIYL)], A-HYDRO-Ω-HYDROXY-

ID: 25322-69-4

| | | | | |
|-----------|--------------|----------|----------|-------------|
| %: 0.1-1% | GS: LT - UNK | RC: None | NANO: No | ROLE: Resin |
|-----------|--------------|----------|----------|-------------|

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority Lists

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

PROPANOIC ACID, 2-METHYL-, 2,2-DIMETHYL-1-(1-METHYLETHYL)-1,3-PROPANEDIYL ESTER

ID: 6846-50-0

| | | | | |
|-----------|-------------|----------|----------|-------------|
| %: 0.1-1% | GS: LT - P1 | RC: None | NANO: No | ROLE: Resin |
|-----------|-------------|----------|----------|-------------|

HAZARDS: AGENCY(IES) WITH WARNINGS:

END TEDX - Potential Endocrine Disruptor Potential Endocrine Disruptor

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

ISOCYANIC ACID, POLYMETHYLENEPOLYPHENYLENE ESTER, POLYMER WITH A-HYDRO-Ω-HYDROXPOLY(OXY-1,2-ETHANEDIYL)

ID: 57636-09-6

| | | | | |
|-----------|--------------|----------|----------|----------------|
| %: 0.1-1% | GS: LT - UNK | RC: None | NANO: No | ROLE: Hardener |
|-----------|--------------|----------|----------|----------------|

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority Lists

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

POTASSIUM OXIDE (K2O)

ID: 12136-45-7

| | | | | |
|-----------|--------------|----------|----------|-----------------|
| %: 0.1-1% | GS: LT - UNK | RC: None | NANO: No | ROLE: Aggregate |
|-----------|--------------|----------|----------|-----------------|

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority Lists

SUBSTANCE NOTES: A substance range is given to protect the intellectual property of both Dur-A-Flex and its suppliers.

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.

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.

Section 5: General Notes

Residuals and impurities were considered for all raw materials and those that show up above the stated threshold were listed.



Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Dur-A-Flex

ADDRESS:

95 Goodwin Street, East Hartford, CT 06108

WEBSITE: www.dur-a-flex.com

CONTACT NAME: Ron Phillips

TITLE: Product Manager

PHONE: 800-253-3539

EMAIL: contact_us@dur-a-flex.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 | GLO | Global warming | PHY | Physical Hazard (reactive) |
| CAN | Cancer | MAM | Mammalian/ systematic/organ toxicity | REP | Reproductive toxicity |
| DEV | Developmental toxicity | MUL | Multiple hazards | RES | Respiratory sensitization |
| END | Endocrine activity | NEU | Neurotoxicity | SKI | Skin sensitization/ Irritation/corrosivity |
| EYE | Eye irritation/corrosivity | OZO | Ozone depletion | LAN | Land toxicity |
| GEN | Gene mutation | PBT | Persistent Bioaccumulative Toxic | NF | Not found on Priority Hazard Lists |

GreenScreen (GS)

| | | | |
|-------------|---|---------------|--|
| BM-4 | Benchmark-4 (prefer – safer chemical) | LT-P1 | List Translator Possible Benchmark 1 |
| BM-3 | Benchmark-3 (use but still opportunity for improvement) | LT-1 | List Translator Likely Benchmark 1 |
| | Benchmark-2 (use but search for safer substitutes) | LT-UNK | List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark) |
| BM-2 | Benchmark-1 (avoid – chemical of high concern) | NoGS | Unknown (no data on List Translator Lists) |
| BM-1 | Benchmark Unspecified (insufficient data to benchmark) | | |
| BM-U | | | |

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 nanoscale 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 note:

- 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.