

# Tuflex® Force® Premium-Engineered Flooring System for Sports Facilities by Flexco Corporation

## Health Product Declaration v2.1.1

created via: HPDC Online Builder

CLASSIFICATION: 09650

**PRODUCT DESCRIPTION:** Tough, long-wearing Tuflex® Force® sports flooring is engineered to stand up to high-traffic, high-impact use and deliver the reliable comfort and performance features you expect in sports flooring. The vulcanized bonding system results in a solid 3/8"-gauge, high-performance sports floor. The Tuflex formulation is screened according to current authoritative lists and does not contain any chemicals contained in the Living Future Institute's Red List (Living Building Challenge, Imperative 10), substances of very high concern (SVHC) on the REACH candidate list or substances restricted under REACH.

### 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 2 Materials

Explanation(s) provided  
for Residuals/Impurities?  
 Yes  No

*All Substances Above the Threshold Indicated Are:*

**Characterized**  Yes Ex/SC  Yes  No  
*% weight and role provided for all substances.*

**Screened**  Yes Ex/SC  Yes  No  
*All substances screened using Priority Hazard Lists with results disclosed.*

**Identified**  Yes Ex/SC  Yes  No  
*One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.*

#### 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**

**VIRGIN RAW MATERIALS** [ **KAOLIN CLAY** LT-UNK | CAN **STYRENE BUTADIENE RUBBER (SBR)** LT-UNK **NATURAL RUBBER (PRIMARY CASRN IS 9006-04-6)** LT-UNK | RES **EPOXIDIZED SOYBEAN OIL** LT-P1 **ETHYLENE/PROPYLENE/DIENE TERPOLYMER (EPDM)** LT-UNK **UNDISCLOSED** LT-UNK **UNDISCLOSED** BM-1 | RES | AQU | MUL **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-P1 | AQU | SKI | MUL **UNDISCLOSED** LT-P1 | AQU | SKI | EYE | REP | MUL **UNDISCLOSED** LT-P1 **UNDISCLOSED** NoGS **UNDISCLOSED** LT-1 | CAN **UNDISCLOSED** LT-P1 | END **UNDISCLOSED** LT-P1 | MUL **UNDISCLOSED** LT-P1 | AQU | SKI | MUL **UNDISCLOSED** LT-P1 | PBT | MUL **UNDISCLOSED** BM-2 | CAN **UNDISCLOSED** LT-1 | CAN | END **UNDISCLOSED** LT-1 | CAN **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-1 | CAN ] **PRE-CONSUMER RECYCLED VULCANIZED RUBBER** [ **KAOLIN CLAY** LT-UNK | CAN **STYRENE BUTADIENE RUBBER (SBR)** LT-UNK **EPOXIDIZED SOYBEAN OIL** LT-P1 **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-UNK **UNDISCLOSED** BM-1 | RES | AQU | MUL **UNDISCLOSED** LT-P1 | AQU | SKI | MUL **UNDISCLOSED** LT-P1 **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-P1 | END **UNDISCLOSED** LT-1 | CAN **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-1 | CAN **UNDISCLOSED** LT-1 | CAN **UNDISCLOSED** LT-1 | CAN **UNDISCLOSED** LT-1 ]

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:

Some material identifications are withheld and marked as "undisclosed" to protect proprietary information. Percentages (%) provided as ranges to protect proprietary information.

### 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: RFCI FloorScore IAQ Certified

Multi-attribute: NSF/ANSI 332 Resilient Flooring: Platinum

### 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: 2019-05-30

PUBLISHED DATE: 2019-05-31

EXPIRY DATE: 2022-05-30



## 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 2.1.1, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-1-standard](http://www.hpd-collaborative.org/hpd-2-1-1-standard)

### VIRGIN RAW MATERIALS

#: 55.00 - 65.00

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were "Considered", as outlined in Emerging Best Practices. Residuals or impurities with the potential to be present at or above the Content Inventory Threshold indicated that return a GS score of BM-1, LT-1, LT-P1 or NoGS have been disclosed, based on information provided in supplier disclosure letter and as predicted by process chemistry (Pharos CML).

HPD URL: [http://www.flexcofloors.com/tuflex-force/?cbg\\_tz=240](http://www.flexcofloors.com/tuflex-force/?cbg_tz=240)

OTHER MATERIAL NOTES: Percentage (%) provided as a range to protect proprietary information.

### KAOLIN CLAY

ID: 1332-58-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-05-30

#: 32.00 - 44.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Mineral Filler

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

CANCER

MAK

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

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

### STYRENE BUTADIENE RUBBER (SBR)

ID: 9003-55-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-05-30

#: 20.00 - 32.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Polymer

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: A residual of 6PPD (CASRN 793-24-8) is expected to be present based upon process chemistry via the Pharos Chemical and Materials Library. However, this substance is not included in the content inventory because supplier documentation indicates that 6PPD is not used in the manufacturing process.

**NATURAL RUBBER (PRIMARY CASRN IS 9006-04-6)**

ID: 51731-84-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **10.00 - 18.00**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Polymer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

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

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**EPOXIDIZED SOYBEAN OIL**

ID: 8013-07-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **5.00 - 8.00**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Softener**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found****No warnings found on HPD Priority Hazard Lists**SUBSTANCE NOTES: **None.****ETHYLENE/PROPYLENE/DIENE TERPOLYMER (EPDM)**

ID: 25038-36-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **5.00 - 9.00**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Polymer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found****No warnings found on HPD Priority Hazard Lists**SUBSTANCE NOTES: **None.****UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **3.50 - 4.70**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found****No warnings found on HPD Priority Hazard Lists**SUBSTANCE NOTES: **None.**

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **1.60 - 2.50**GS: **BM-1**RC: **None**NANO: **No**ROLE: **Process Aid**

| HAZARD TYPE   | AGENCY AND LIST TITLES                      | WARNINGS  |
|---------------|---|---|
| RESPIRATORY   | AOEC - Asthmagens                           | Asthmagen (Rs) - sensitizer-induced                         |
| 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: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **1.50 - 1.90**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Process Aid**

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

SUBSTANCE NOTES: **None.**

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **1.40 - 1.90**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Process Aid**

| HAZARD TYPE    | AGENCY AND LIST TITLES                      | WARNINGS  |
|----------------|---|---|
| ACUTE AQUATIC  | EU - GHS (H-Statements)                     | H400 - Very toxic to aquatic life                           |
| CHRON AQUATIC  | EU - GHS (H-Statements)                     | H410 - Very toxic to aquatic life with long lasting effects |
| SKIN SENSITIZE | EU - GHS (H-Statements)                     | H317 - May cause an allergic skin reaction                  |
| MULTIPLE       | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters                                  |
| SKIN SENSITIZE | MAK   | Sensitizing Substance Sh - Danger of skin sensitization     |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.60 - 1.80**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Process Aid**

| HAZARD TYPE     | AGENCY AND LIST TITLES                      | WARNINGS   |
|-----------------|---|--|
| CHRON AQUATIC   | EU - GHS (H-Statements)                     | H411 - Toxic to aquatic life with long lasting effects |
| SKIN IRRITATION | EU - GHS (H-Statements)                     | H315 - Causes skin irritation                          |
| EYE IRRITATION  | EU - GHS (H-Statements)                     | H319 - Causes serious eye irritation                   |
| REPRODUCTIVE    | EU - GHS (H-Statements)                     | H361f - Suspected of damaging fertility                |
| MULTIPLE        | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters                             |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.50 - 1.00**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Process Aid**

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

SUBSTANCE NOTES: **None.**

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.45 - 0.95**GS: **NoGS**RC: **None**NANO: **No**ROLE: **Process Aid**

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

SUBSTANCE NOTES: **None.**

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.40 - 6.00**GS: **LT-1**RC: **None**NANO: **No**ROLE: **Pigment**

| HAZARD TYPE | AGENCY AND LIST TITLES            | 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: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2019-05-30**

#: **0.30 - 0.60**      GS: **LT-P1**      RC: **None**      NANO: **No**      ROLE: **Process Aid**

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

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2019-05-30**

#: **0.12 - 0.18**      GS: **LT-P1**      RC: **None**      NANO: **No**      ROLE: **Process Aid**

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

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2019-05-30**

#: **0.10 - 0.40**      GS: **LT-P1**      RC: **None**      NANO: **No**      ROLE: **Process Aid**

| HAZARD TYPE    | AGENCY AND LIST TITLES                      | WARNINGS  |
|----------------|---|---|
| ACUTE AQUATIC  | EU - GHS (H-Statements)                     | H400 - Very toxic to aquatic life                           |
| CHRON AQUATIC  | EU - GHS (H-Statements)                     | H410 - Very toxic to aquatic life with long lasting effects |
| SKIN SENSITIZE | EU - GHS (H-Statements)                     | H317 - May cause an allergic skin reaction                  |
| MULTIPLE       | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters                           |
| SKIN SENSITIZE | MAK   | Sensitizing Substance Sh - Danger of skin sensitization     |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2019-05-30**

#: **0.10 - 0.40**      GS: **LT-P1**      RC: **None**      NANO: **No**      ROLE: **Process Aid**

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

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2019-05-30**

#: **0.00 - 5.00**      GS: **BM-2**      RC: **None**      NANO: **No**      ROLE: **Pigment**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS   |
|-------------|------------------------|--|
| CANCER      | MAK                    | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

### UNDISCLOSED



#: **0.00 - 10.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

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

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

## UNDISCLOSED

#: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

| HAZARD TYPE | AGENCY AND LIST TITLES            | WARNINGS  |
|-------------|-----------------------------------|---|
| CANCER      | IARC                              | Group 1 - Agent is Carcinogenic to humans                                     |
| 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                   | H350i - May cause cancer by inhalation  |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **Impurity/Residual** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: **None.****UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

| HAZARD TYPE | AGENCY AND LIST TITLES            | 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                   | H350i - May cause cancer by inhalation  |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**PRE-CONSUMER RECYCLED VULCANIZED RUBBER**%: **32.00 - 45.00**PRODUCT THRESHOLD: **1000 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were "Considered", as outlined in Emerging Best Practices. Residuals or impurities with the potential to be present at or above the Content Inventory Threshold indicated that return a GS score of BM-1, LT-1, LT-P1 or NoGS have been disclosed, based on information provided in supplier disclosure letter and as predicted by process chemistry (Pharos CML).

HPD URL: [http://www.flexcofloors.com/tuflex-force/?cbg\\_tz=240](http://www.flexcofloors.com/tuflex-force/?cbg_tz=240)OTHER MATERIAL NOTES: **Percentage (%) provided as a range to protect proprietary information.**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **55.00 - 68.00**GS: **LT-UNK**RC: **PreC**NANO: **No**ROLE: **Mineral Filler**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**CANCER****MAK****Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**STYRENE BUTADIENE RUBBER (SBR)**

ID: 9003-55-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **25.00 - 33.00**GS: **LT-UNK**RC: **PreC**NANO: **No**ROLE: **Polymer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found****No warnings found on HPD Priority Hazard Lists**

SUBSTANCE NOTES: A residual of 6PPD (CASRN 793-24-8) is expected to be present based upon process chemistry via the Pharos Chemical and Materials Library. However, this substance is not included in the content inventory because supplier documentation indicates that 6PPD is not used in the manufacturing process.

**EPOXIDIZED SOYBEAN OIL**

ID: 8013-07-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **3.00 - 5.00**GS: **LT-P1**RC: **PreC**NANO: **No**ROLE: **Softener**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found****No warnings found on HPD Priority Hazard Lists**SUBSTANCE NOTES: **None****UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.90 - 1.50**GS: **LT-UNK**RC: **PreC**NANO: **No**ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found****No warnings found on HPD Priority Hazard Lists**SUBSTANCE NOTES: **None.**

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.90 - 1.50**GS: **LT-UNK**RC: **PreC**NANO: **No**ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **None.****UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.90 - 1.30**GS: **BM-1**RC: **PreC**NANO: **No**ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

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: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **0.80 - 1.50**GS: **LT-P1**RC: **PreC**NANO: **No**ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ACUTE AQUATIC

EU - GHS (H-Statements)

H400 - Very toxic to aquatic life

CHRON AQUATIC

EU - GHS (H-Statements)

H410 - Very toxic to aquatic life with long lasting effects

SKIN SENSITIZE

EU - GHS (H-Statements)

H317 - May cause an allergic skin reaction

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SKIN SENSITIZE

MAK

Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-05-30**

#: **0.40 - 0.90**

GS: **LT-P1**

RC: **PreC**

NANO: **No**

ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **None.**

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-05-30**

#: **0.40 - 0.90**

GS: **LT-UNK**

RC: **PreC**

NANO: **No**

ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **None.**

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-05-30**

#: **0.30 - 0.70**

GS: **LT-UNK**

RC: **PreC**

NANO: **No**

ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **None.**

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-05-30**

#: **0.30 - 0.60**

GS: **LT-P1**

RC: **PreC**

NANO: **No**

ROLE: **Process Aid**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**ENDOCRINE**

**TEDX - Potential Endocrine Disruptors**

**Potential Endocrine Disruptor**

SUBSTANCE NOTES: **Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.**

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **Impurity/Residual** GS: **LT-1** RC: **PreC** NANO: **No** ROLE: **Impurity/Residual**

| HAZARD TYPE | AGENCY AND LIST TITLES            | WARNINGS  |
|-------------|-----------------------------------|---|
| CANCER      | IARC                              | Group 1 - Agent is Carcinogenic to humans                                     |
| 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                   | H350i - May cause cancer by inhalation  |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **Impurity/Residual** GS: **LT-UNK** RC: **PreC** NANO: **No** ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: **None.**

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-05-30**%: **Impurity/Residual** GS: **LT-1** RC: **PreC** NANO: **No** ROLE: **Impurity/Residual**

| HAZARD TYPE | AGENCY AND LIST TITLES            | 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                   | H350i - May cause cancer by inhalation  |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2019-05-30**

#: **0.00 - 6.00**      GS: **LT-1**      RC: **PreC**      NANO: **No**      ROLE: **Pigment**

| HAZARD TYPE | AGENCY AND LIST TITLES            | 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: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2019-05-30**

#: **0.00 - 7.00**      GS: **BM-2**      RC: **PreC**      NANO: **No**      ROLE: **Pigment**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS   |
|-------------|------------------------|--|
| CANCER      | MAK                    | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.

## UNDISCLOSED

| HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b> |                                       | HAZARD SCREENING DATE: <b>2019-05-30</b>   |                 |                      |
|---|---------------------------------------|--|-----------------|----------------------|
| %: <b>0.00 - 9.00</b>   | GS: <b>LT-1</b>                       | RC: <b>PreC</b>  | NANO: <b>No</b> | ROLE: <b>Pigment</b> |
| HAZARD TYPE   | AGENCY AND LIST TITLES                | 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 |                 |                      |
| CANCER  | MAK                                   | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels                     |                 |                      |

SUBSTANCE NOTES: Hazards as shown above may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.



## 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

### RFCI FloorScore IAQ Certified

CERTIFYING PARTY: **Third Party**

APPLICABLE FACILITIES: **All**

CERTIFICATE URL:

[https://www.scs-certified.com/products/cert\\_pdfs/FlexcoFloors\\_2018\\_SCS-FS-02238\\_s2.pdf](https://www.scs-certified.com/products/cert_pdfs/FlexcoFloors_2018_SCS-FS-02238_s2.pdf)

ISSUE DATE:      EXPIRY DATE:      CERTIFIER OR LAB:

2018-07-01

2019-06-30

SCS Global Services

CERTIFICATION AND COMPLIANCE NOTES: RFCI FloorScore Indoor Air Quality (IAQ) Certification is in compliance with CDPH/EHLB Standard Method v1.2-2017 (California Section 01350), effective April 1, 2017, for the school classroom and private office parameters when modeled as Flooring.

### MULTI-ATTRIBUTE

### NSF/ANSI 332 Resilient Flooring: Platinum

CERTIFYING PARTY: **Third Party**

APPLICABLE FACILITIES: **All**

CERTIFICATE URL:

[https://www.scs-certified.com/products/cert\\_pdfs/Flexco\\_2017\\_SCS-RF-04167\\_s2.pdf](https://www.scs-certified.com/products/cert_pdfs/Flexco_2017_SCS-RF-04167_s2.pdf)

ISSUE DATE:      EXPIRY DATE:      CERTIFIER OR LAB: **SCS**

2016-09-30

2019-09-30

Global Services

CERTIFICATION AND COMPLIANCE NOTES: NSF/ANSI 332 is a voluntary, multi-attribute standard that evaluates the environmental and social impacts of resilient flooring products. Qualification of certification under this standard requires conformance to criteria including product design, product manufacturing, long-term value, end of life management, corporate governance, and innovation. Tuflex Force sports flooring products have been certified to the platinum level of NSF/ANSI 332.

## 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.*

### EXCELSIOR MS-700

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

MS-700 is a premium, one component modified silane adhesive used for the permanent installation of vinyl & rubber flooring products, including recycled or crumb rubber flooring products. MS-700 is free of water, solvents, VOCs and hazardous chemicals, such as those found in urethanes and epoxies. Technical Data Sheet URL:

[http://excelsiorproducts.net/wp-content/uploads/2017/01/Excelsior\\_MS-700\\_DataSheet.pdf](http://excelsiorproducts.net/wp-content/uploads/2017/01/Excelsior_MS-700_DataSheet.pdf). VOC Content: 0 g/l.

### EXCELSIOR EW-710

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

EW-710 is a non-flammable two-part urethane-modified epoxy adhesive used for the permanent, indoor installation of vinyl, rubber and quartz flooring products. EW-710 is low VOC and solvent free. EW-710 is RFCI FloorScore® Indoor Air Quality (IAQ) certified by SCS Global Services, indicating compliance with CDPH/EHLB Standard Method v1.1-2012 (California Section 01350), effective January 1, 2012, for the school classroom, private office, and single-family residence parameters when modeled as flooring (Registration # SCS-FS-02963, valid from March 1, 2018 to February 28, 2019, Certificate URL: [https://www.scs-certified.com/products/cert\\_pdfs/RHC\\_2018\\_SCS-FS-02963\\_s.pdf](https://www.scs-certified.com/products/cert_pdfs/RHC_2018_SCS-FS-02963_s.pdf)). Technical Data Sheet URL: [http://excelsiorproducts.net/wp-content/uploads/2017/01/Excelsior\\_EW-710\\_DataSheet.pdf](http://excelsiorproducts.net/wp-content/uploads/2017/01/Excelsior_EW-710_DataSheet.pdf). VOC Content: <12 g/l.

## Section 5: General Notes

Tuflex Force sports flooring is Free of PVC, phthalates and halogens. It is made in the USA and meets FloorScore® and NSF 332 Platinum certification. The Tuflex Force formulation is screened according to current authoritative lists and does not contain any chemicals contained in the Living Future Institute's Red List (Living Building Challenge, Imperative 10), substances of very high concern (SVHC) on the REACH candidate list, or substances restricted under REACH. Components designated as "Undisclosed" are kept confidential to protect proprietary information. Hazards as shown in this Health Product Declaration may not represent a significant health risk, as exposure pathways and other factors in risk assessment are not defined. Hazards are applicable to the initial substance, whereas the end product is a solid vulcanized rubber flooring part.



## MANUFACTURER INFORMATION

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MANUFACTURER: **Flexco Corporation**

ADDRESS: **1401 East 6th Street**

**Tuscumbia Alabama 35674, United States**

WEBSITE: **http://www.flexcofloors.com**

CONTACT NAME: **Jacob Gentillon**

TITLE: **Chemist**

PHONE: **419-435-8546 Ex. 5115**

EMAIL: **jkgentillon@flexcofloors.com**

## KEY

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**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.*