Diamon-Fusion® Step 1 Hand Applied Product
by Diamon-Fusion International

CLASSIFICATION: 09 96 00 Finishes: High-Performance Coatings

PRODUCT DESCRIPTION: Diamon-Fusion is an optically clear, low-maintenance protective coating that transforms ordinary glass or other silica-based surfaces into a high-performing, water repellent surface. By filling in the microscopic peaks and valleys of the substrate, Diamon-Fusion creates an ultra-thin, invisible barrier that protects surfaces from stains, corrosion, and other environmental pollutants. Just like a non-stick cooking pan makes cleaning easier and less frequent, so too will Diamon-Fusion reduce cleaning time and the frequency of cleanings. This HPD covers Diamon-Fusion® Step 1 Hand Applied Product (HAB). Other CSI MasterFormat may include 09 01 90.53 Finishes: Maintenance Coatings.

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
- Considered in 1 of 1 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
--- | --- | --- | --- | ---
DIAMON-FUSION® STEP 1 HAND APPLIED PRODUCT | ETHANOL | BM-2 | CAN | PHY | END | REP | DEL | UNDISCLOSED | LT-PT | ISOPOPOLY | ALCOHOL | BM-2 | PHY | EYE | UNDISCLOSED | LT-UNK | UNDISCLOSED | LT-1 | RES | CAN | SKI | MAM | PHY | WATER | BM-4 |

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

INVENTORY AND SCREENING NOTES:
This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1.1, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight. Substances not "Identified" are those considered proprietary to the manufacturer, and thus are "Undisclosed" on this HPD.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 613
Regulatory (g/l): 614
Does the product contain exempt VOCs: No
Are ultra-low VOC tints available: N/A

CERTIFICATIONS AND COMPLIANCE

VOC emissions: CDPH Standard Method – Not tested
VOC content: EPA Method 24 - Volatile Matter Content (EPA 24)

CONSISTENCY WITH OTHER PROGRAMS
Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:
### DIAMON-FUSION® STEP 1 HAND APPLIED PRODUCT

**MATERIAL THRESHOLD:** 1000 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES NOTES:** Residuals and Impurities were “Considered”, as outlined in Emerging Best Practices. No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS based on information provided in supplier SDS and as predicted by process chemistry (Pharos CML).

**OTHER MATERIAL NOTES:** Percent by weight of substances provided as range in order to further protect the proprietary nature of this formulation.

### ETHANOL

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-04-03

<table>
<thead>
<tr>
<th>%: 70.0000 - 81.0000</th>
<th>GS: BM-2</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Solvent</th>
</tr>
</thead>
</table>

**HAZARD TYPE** | **AGENCY AND LIST TITLES** | **WARNINGS**
--- | --- | ---
CANCER | IARC | Group 1 - Agent is Carcinogenic to humans
CANCER | CA EPA - Prop 65 | Carcinogen - specific to chemical form or exposure route
PHYSICAL HAZARD (REACTIVE) | EU - GHS (H-Statements) | H225 - Highly flammable liquid and vapour
ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor
CANCER | MAK | Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels
CANCER | Japan - GHS | Carcinogenicity - Category 1A
REPRODUCTIVE | Japan - GHS | Toxic to reproduction - Category 1A
DEVELOPMENTAL | CA EPA - Prop 65 | Developmental - specific to chemical form or exposure route

**SUBSTANCE NOTES:** Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern). GreenScreen Benchmark® assessment score of BM-2 was provided by the HPD Builder Tool. The GreenScreen Assessment (NSF, 2014) was restricted to industrial and occupational uses, and excluded ethanol in alcoholic beverages. Hazards listed above may be specific to exposure route, and thus may not apply to this product when used as intended.
<table>
<thead>
<tr>
<th>Substance</th>
<th>ID</th>
<th>HAZARD SCREENING METHOD</th>
<th>HAZARD SCREENING DATE</th>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>67-63-0</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-04-03</td>
<td>5.0000 - 10.0000</td>
<td>BM-2</td>
<td>None</td>
<td>No</td>
<td>Solvent</td>
</tr>
<tr>
<td>UNDISCLOSED</td>
<td></td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-04-03</td>
<td>1.0000 - 10.0000</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Hydrophobic Coating</td>
</tr>
<tr>
<td>UNDISCLOSED</td>
<td></td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-04-03</td>
<td>0.1000 - 1.0000</td>
<td>LT-1</td>
<td>None</td>
<td>No</td>
<td>Catalyst</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:**
- ISOPROPYL ALCOHOL: Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern). GreenScreen Benchmark® assessment score of BM-2 was provided by the HPD Builder Tool.
- UNDISCLOSED: This substance is held as proprietary by the manufacturer. Substance is not included on the Living Building Challenge (LBC) Red List Chemical Guide (Version 3.1).
<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPIRATORY</td>
<td>AOEC - Asthmagens</td>
<td>Asthmagen (Rr) - irritant-induced</td>
</tr>
<tr>
<td>CANCER</td>
<td>US NIH - Report on Carcinogens</td>
<td>Known to be a human Carcinogen</td>
</tr>
<tr>
<td>SKIN IRRITATION</td>
<td>EU - GHS (H-Statements)</td>
<td>H314 - Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels</td>
</tr>
<tr>
<td>MAMMALIAN</td>
<td>US EPA - EPCRA Extremely Hazardous Substances</td>
<td>Extremely Hazardous Substances</td>
</tr>
<tr>
<td>CANCER</td>
<td>New Zealand - GHS</td>
<td>6.7A - Known or presumed human carcinogens</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>Korea - GHS</td>
<td>H290 - May be corrosive to metals</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** This substance is held as proprietary by the manufacturer. Substance is not included on the Living Building Challenge (LBC) Red List Chemical Guide (Version 3.1).

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**WATER**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>HAZARD SCREENING DATE</th>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharos Chemical and Materials Library</td>
<td>2019-04-03</td>
<td>0.0100 - 0.1000</td>
<td>BM-4</td>
<td>None</td>
<td>No</td>
<td>Solvent</td>
</tr>
</tbody>
</table>

**HAZARD TYPE**  
**AGENCY AND LIST TITLES**  
**WARNINGS**

No hazards found

**SUBSTANCE NOTES:** GreenScreen Benchmark® assessment score of BM-4 was provided by the HPD Builder Tool.
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

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
<th>ISSUE DATE:</th>
<th>2019-02-20</th>
<th>CERTIFIER OR LAB:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>N/A</td>
<td>EXPIRY DATE:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td>CDPH Standard Method – Not tested</td>
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</tr>
</tbody>
</table>

### VOC CONTENT

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
<th>ISSUE DATE:</th>
<th>2019-02-20</th>
<th>CERTIFIER OR LAB:</th>
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</tr>
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<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All</td>
<td>EXPIRY DATE:</td>
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<tr>
<td>CERTIFICATE URL:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td>VOC Content calculated from formulation.</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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.

### DIAMON-FUSION® STEP 2 HAND APPLIED PRODUCT

| HPD URL: | https://hpdrepository.hpd-collaborative.org/ |

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Required for application of Diamon-Fusion® 2-Step Hand Applied Coating System.

Section 5: General Notes

Similar to a non-stick cooking pan, Diamon-Fusion is an ultra-thin transparent barrier that adheres to the surface of the glass which repels dirt, water, and debris for an easy-to-clean solution. Protect the glass on commercial buildings from environmental damage, while reducing maintenance costs up to 50%. Diamon-Fusion keeps glass looking cleaner for longer and provides protection against wear and tear for entrance doors, guardrail systems, canopies, storefronts and much more. Additionally, treating shower glass with Diamon-Fusion eliminates the need for any harsh chemical cleaners, the glass stays cleaner for longer, and can easily be cleaned with water and a simple wipe down.
MANUFACTURER INFORMATION

MANUFACTURER: Diamon-Fusion International
ADDRESS: 9361 Irvine Boulevard
          Irvine CA 92618, USA
WEBSITE: www.dfisolutions.com

CONTACT NAME: Syndi Sim
TITLE: Vice President, Marketing
PHONE: 1.888.344.4334
EMAIL: ssim@diamonfusion.com

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation
GLO Global warming
MAM Mammalian/systemic/organ toxicity
MUL Multiple hazards
NEU Neurotoxicity
OZO Ozone depletion
PBT Persistent Bioaccumulative Toxic
PHY Physical Hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
LAN Land Toxicity
NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspecified (insufficient data to benchmark)

LT-P1 List Translator Possible Benchmark 1
LT-1 List Translator Likely Benchmark 1
LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.