

CLASSIFICATION: 08 81 00 Spandrel Glazing

PRODUCT DESCRIPTION: OPACI-COAT-300® has been used on spandrel and wall cladding glass on thousands of buildings worldwide – including some of the world’s prominent commercial projects. Using OPACI-COAT-300® allows architects and designers to access a virtually unlimited color palette – with one of the strictest color tolerances – to create a “stand-out” project or work toward a harmonious appearance from vision glass to spandrel glass. Architects, designers and facade consultants can count on the material to not reduce the strength of heat strengthened glass, and when specified, provide glass fallout resistance. "OPACI-COAT-300®" is the trade name for a patented one component, water-based silicone coating that is fully cured to a tack-free silicone elastomeric film, providing opacification in any color to glass and related construction materials. This HPD covers OPACI-COAT-300® as applied to glass and fully cured.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format <input type="radio"/> Nested Materials Method <input checked="" type="radio"/> Basic Method	Threshold level <input type="radio"/> 100 ppm <input checked="" type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Per OSHA MSDS <input type="radio"/> Other	Residuals/Impurities <input checked="" type="radio"/> Considered <input type="radio"/> Partially Considered <input type="radio"/> Not Considered <small>Explanation(s) provided for Residuals/Impurities?</small> <input checked="" type="radio"/> Yes <input type="radio"/> No	<i>Are All Substances Above the Threshold Indicated:</i> Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No <i>Percent Weight and Role Provided?</i> Screened <input checked="" type="radio"/> Yes <input type="radio"/> No <i>Using Priority Hazard Lists with Results Disclosed?</i> Identified <input checked="" type="radio"/> Yes <input type="radio"/> No <i>Name and Identifier Provided?</i>
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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
OPACI-COAT-300® WATER-BASED SILICONE SPANDREL [SOLID / PLATE GLASS LT-UNK SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED BM-2 SILICA, AMORPHOUS LT-P1 | CAN FERRIC OXIDE BM-2 | CAN NICKEL RUTILE YELLOW LT-1 | CAN | RES C.I. PIGMENT GREEN 50 LT-1 | RES | CAN | GEN C.I. PIGMENT YELLOW 227 NoGS C.I. PIGMENT BLUE 28 LT-1 | RES | CAN | GEN FERRIC OXIDE YELLOW LT-UNK CARBON BLACK LT-1 | CAN C.I. PIGMENT GREEN 36 LT-UNK 5,12-DIHYDROQUINO(2,3-B)ACRIDINE-7,14-DIONE LT-UNK C.I. PIGMENT BLUE 15 BM-3 2,2'-((3,3'-DICHLORO(1,1'-BIPHENYL)-4,4'-DIYL)BIS(AZO))BIS(N-(4-C-HORO-2,5-DIMETHOXYPHENYL)-3-OXOBUTYRAMIDE) LT-P1 | MUL TITANIUM DIOXIDE LT-1 | CAN | END C.I. PIGMENT YELLOW 216 NoGS]

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, 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. Therefore, this HPD is consistent with the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1). This HPD covers all possible color options of OPACI-COAT-300®. Not every pigment substance listed will be present in every color. Percent by weight of pigments given represents the absolute maximum possible in the product if only a single pigment is used. However, multiple pigments are routinely blended to create the numerous colors offered; therefore, most pigments listed in this HPD will fall well below the Content Inventory Threshold indicated. Please seek manufacturer assistance if more information is required.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*
VOC emissions: CDPH Standard Method V1.2

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

Third Party Verified? <input type="radio"/> Yes <input checked="" type="radio"/> No	PREPARER: Self-Prepared VERIFIER: VERIFICATION #:	SCREENING DATE: 2018-05-16 PUBLISHED DATE: 2018-05-16 EXPIRY DATE: 2021-05-16
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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

OPACI-COAT-300® WATER-BASED SILICONE SPANDREL

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are known or expected to be present at or above the Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS, based on direct testing (FTIR and GC/MS), supplier SDS, and as predicted by process chemistry (Pharos CML).

OTHER PRODUCT NOTES: Percent by weight of substances reported as ranges to account for possible differences in glass type selected, and for the numerous colors of OPACI-COAT-300 available for specification.

SOLID / PLATE GLASS ID: 65997-17-3

%: 98.6000 - 99.1000
GS: LT-UNK
RC: None
NANO: No
ROLE: Transparent Structural Component

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

SUBSTANCE NOTES: Substrate to which OPACI-COAT-300 water-based silicone coating is applied. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern). No residuals or impurities from this substance are known or expected to be present in this product at or above the inventory threshold indicated, as predicted by process chemistry (Pharos CML). Specific guidelines are being created by the HPD Collaborative to address known issues related to transparency and disclosure for several materials (“Special Conditions”) including Float Glass. This HPD will be updated as appropriate when these guidelines become available.

SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED ID: 70131-67-8

%: 0.7000 - 1.2000
GS: BM-2
RC: None
NANO: No
ROLE: Opacification Coating for Glass

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

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List (Green Half-Circle - Expected Low Concern). Crosslinked Polydimethylsiloxane. Water-based silicone coating that is fully cured to a tack-free silicone elastomeric film providing opacification in any color to glass and related construction materials.

SILICA, AMORPHOUS ID: 7631-86-9

%: 0.1000 - 0.3000
GS: LT-P1
RC: None
NANO: No
ROLE: Reinforcing Agent

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	Japan - GHS	Carcinogenicity - Category 1A
SUBSTANCE NOTES: Synonyms: Diatomaceous earth; Silicon dioxide. Amorphous silica is the non-crystalline form of SiO2. Hazard not expected to apply once substance is bound in the matrix of the cured product.		

FERRIC OXIDE

ID: 1309-37-1

%: 0.0000 - 0.2000	GS: BM-2	RC: None	NANO: No	ROLE: Pigment
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification		
SUBSTANCE NOTES: Synonyms: Iron Oxide; Pigment Red 101. This substance is considered essentially inert for the purposes of Pharos toxics scoring (Pharos CML). Hazard not expected to apply once substance is bound in the matrix of the cured product. Substance not present in all colors; contact manufacturer if more information is required.				

NICKEL RUTILE YELLOW

ID: 8007-18-9

?: 0.0000 - 0.2000	GS: LT-1	RC: None	NANO: No	ROLE: Pigment
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
CANCER	IARC		Group 1 - Agent is Carcinogenic to humans	
CANCER	CA EPA - Prop 65		Carcinogen	
RESPIRATORY	AOEC - Asthmagens		Asthmagen (ARs) - sensitizer-induced - inhalable forms only	
SUBSTANCE NOTES: Synonym: C. I. Pigment Yellow 53. Hazards not expected to apply once substance is bound in the matrix of the cured product. Substance not present in all colors; contact manufacturer for more information.				

C.I. PIGMENT GREEN 50

ID: 68186-85-6

?: 0.0000 - 0.2000	GS: LT-1	RC: None	NANO: No	ROLE: Pigment
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted		
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans		
CANCER	CA EPA - Prop 65	Carcinogen		
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only		
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
<p>SUBSTANCE NOTES: Hazards not expected to apply once substance is bound in the matrix of the cured product. Substance not present in all colors; contact manufacturer if more information is required.</p>		

C.I. PIGMENT YELLOW 227

ID: 1374645-21-2

%: **0.0000 - 0.2000**
 GS: **NoGS**
 RC: **None**
 NANO: **No**
 ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Substance not present in all colors; contact manufacturer if more information is required.

C.I. PIGMENT BLUE 28

ID: 1345-16-0

%: **0.0000 - 0.2000**
 GS: **LT-1**
 RC: **None**
 NANO: **No**
 ROLE: **Pigment**

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: Hazards not expected to apply once substance is bound in the matrix of the cured product. Substance not present in all colors; contact manufacturer if more information is required.

FERRIC OXIDE YELLOW

ID: 51274-00-1

%: **0.0000 - 0.2000**
 GS: **LT-UNK**
 RC: **None**
 NANO: **No**
 ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Synonym: C.I. Pigment Yellow 42. Substance not present in all colors; contact manufacturer if more information is required.

CARBON BLACK

ID: 1333-86-4

%: **0.0000 - 0.1000**
 GS: **LT-1**
 RC: **None**
 NANO: **No**
 ROLE: **Pigment**

HAZARDS:		AGENCY(IES) WITH WARNINGS:	
CANCER		US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER		CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER		IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CANCER		MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Carbon Black is one of several compounds with warnings restricted to unbound/respirable forms. Specific guidelines are being created to address known issues related to transparency and disclosure for several materials (“Special Conditions”), including those with Form-Specific Hazards such as Carbon Black. This HPD will be updated as appropriate when these guidelines become available. Substance not present in all colors; contact manufacturer if more information is required.

C.I. PIGMENT GREEN 36

ID: 14302-13-7

%: 0.0000 - 0.1000	GS: LT-UNK	RC: None	NANO: No	ROLE: Pigment
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
None Found		No warnings found on HPD Priority lists		

SUBSTANCE NOTES: Substance not present in all colors; contact manufacturer if more information is required.

5,12-DIHYDROQUINO(2,3-B)ACRIDINE-7,14-DIONE

ID: 1047-16-1

%: 0.0000 - 0.1000	GS: LT-UNK	RC: None	NANO: No	ROLE: Pigment
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
None Found		No warnings found on HPD Priority lists		

SUBSTANCE NOTES: Substance not present in all colors; contact manufacturer if more information is required.

C.I. PIGMENT BLUE 15

ID: 147-14-8

%: 0.0000 - 0.1000	GS: BM-3	RC: None	NANO: No	ROLE: Pigment
HAZARDS:		AGENCY(IES) WITH WARNINGS:		
None Found		No warnings found on HPD Priority lists		

SUBSTANCE NOTES: Substance not present in all colors; contact manufacturer if more information is required.

2,2'-((3,3'-DICHLORO(1,1'-BIPHENYL)-4,4'-DIYL)BIS(AZO))BIS(N-(4-C-HORO-2,5-DIMETHOXYPHENYL)-3-OXOBUTYRAMIDE)

ID: 5567-15-7

%: 0.0000 - 0.1000	GS: LT-P1	RC: None	NANO: No	ROLE: Pigment
HAZARDS:		AGENCY(IES) WITH WARNINGS:		

SUBSTANCE NOTES: **Synonym: C.I. Pigment Yellow 83.** Hazards not expected to apply once substance is bound in the matrix of the cured product. Substance not present in all colors; contact manufacturer if more information is required.

TITANIUM DIOXIDEID: **13463-67-7**%: **0.0000 - 0.2000**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: Identified on the US EPA Safer Chemical Ingredient List. Form-specific hazards: airborne particles of respirable size – occupational setting. Specific guidelines are being created to address known issues related to transparency and disclosure for several materials (“Special Conditions”), including those with Form-Specific Hazards such as Titanium Dioxide. This HPD will be updated as appropriate when these guidelines become available. The Material Health Harmonization Task Group convened by the USGBC states that pigmentary titanium dioxide was "determined to be Benchmark 2 using the full GS (GreenScreen) method” (<http://ow.ly/Z5ken>). Substance not present in all colors; contact manufacturer if more information is required.

C.I. PIGMENT YELLOW 216ID: **85536-73-8**%: **0.0000 - 0.2000**GS: **NoGS**RC: **None**NANO: **No**ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Substance not present in all colors; contact manufacturer if more information is required.

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 V1.2

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2017-**

EXPIRY DATE:

CERTIFIER OR LAB: **Berkeley**

APPLICABLE FACILITIES: **Ridgefield, WA USA**

09-01

Analytical

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **Certificate Number: 170901-02. Reference Standard: California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017 (Emission testing method for CA Specification 01350). Modeling scenario: CDPH/EHLB/Standard Method V1.2 Standard Classroom & Office. Product name: OPACI-COAT-300 / OPACI- COAT-300 White #0-1060. Results: "No formaldehyde or other target CREL VOCs were detected."**

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

ICD values sustainability, responsibility, quality and innovation. Our purpose is to make healthier living and work spaces through chemistry.



MANUFACTURER INFORMATION

MANUFACTURER: **ICD High Performance Coatings**
ADDRESS: **7350 S Union Ridge Parkway**
Ridgefield WA 98642, USA
WEBSITE: **www.icdcoatings.com**

CONTACT NAME: **Chris Fronsoe**
TITLE: **Global Sales Manager**
PHONE: **360-546-2286**
EMAIL: **chris.fronsoe@icdcoatings.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/systemic/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
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

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.