

HPD UNIQUE IDENTIFIER: 28270

CLASSIFICATION: 07 57 13 Sprayed Polyurethane Foam Roofing

PRODUCT DESCRIPTION: SKYTITE C3-3.0 is an HFO-blown, *Zero Ozone-Depleting (Zero-ODP), spray polyurethane foam (SPF) system designed for roofing applications. SKYTITE C3-3.0 is compatible with most common construction materials but can only be processed with ELASTOSPRAY® 8000A Isocyanate.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format ☐ Nested Materials Method ☒ Basic Method	Threshold Level ☒ 100 ppm ☐ 1,000 ppm ☐ Per GHS SDS ☐ Other	Residuals/Impurities ☒ Considered ☐ Partially Considered ☐ Not Considered Explanation(s) provided for Residuals/Impurities? ☒ Yes ☐ No	<i>All Substances Above the Threshold Indicated Are:</i> Characterized ☐ Yes Ex/SC ☒ Yes ☐ No <i>% weight and role provided for all substances.</i> Screened ☐ Yes Ex/SC ☒ Yes ☐ No <i>All substances screened using Priority Hazard Lists with results disclosed.</i> Identified ☐ Yes Ex/SC ☐ Yes ☒ No <i>One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.</i>
Threshold Disclosed Per ☐ Material ☒ Product			

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

SKYTITE® C3-3.0 S RESIN [**UNDISCLOSED** NoGS **TRI-(2-CHLOROISOPROPYL)PHOSPHATE** BM-U | END | MUL | PBT **CHLOROTRIFLUOROPROPENE** NoGS **DIETHYLENE GLYCOL** LT-P1 | END **TRIETHYL PHOSPHATE (TEP)** LT-UNK **N,N-DIMETHYLCYCLOHEXYLAMINE** LT-P1 | MUL **POLYETHYLENE GLYCOL MONO(BRANCHED P-NONYLPHENYL) ETHER** BM-1tp | END | MUL | REP | AQU | DEV **UNDISCLOSED** LT-UNK **WATER** BM-4 **UNDISCLOSED** NoGS **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-UNK **UNDISCLOSED** LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1tp

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

All substances including residuals and impurities above the threshold are included in the screening process.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 88.1	Regulatory (g/l): 89.5	CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.
Does the product contain exempt VOCs: No		VOC emissions: UL/GreenGuard Gold Certified
Are ultra-low VOC tints available: N/A		VOC content: GreenGuard - Indoor Air Quality Certified
CONSISTENCY WITH OTHER PROGRAMS		
No pre-checks completed or disclosed.		

Third Party Verified? ☐ Yes ☒ No	PREPARER: Self-Prepared VERIFIER: VERIFICATION #:	SCREENING DATE: 2022-02-09 PUBLISHED DATE: 2022-04-20 EXPIRY DATE: 2025-02-09
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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 2.2, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-2-standard

SKYTITE® C3-3.0 S RESIN

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: All substances including residuals and impurities above the OSHA declared threshold are included in the HPD evaluation.

OTHER PRODUCT NOTES: SKYTITE C3-3.0 is a spray polyurethane foam (SPF) system intended for installation by qualified contractors trained in the processing and application of SPF systems, as well as the plural-component polyurethane dispensing equipment required to do so. Contractors and applicators must comply with all applicable and appropriate storage, handling, processing and safety guidelines. BASF technical service personnel should be consulted in all cases where application conditions are questionable.

UNDISCLOSED

ID: **Undisclosed**

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

HAZARD SCREENING DATE: **2022-02-09 6:47:06**

?: **25.0000 - 30.0000**

GS: **NoGS**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This material is a polymer in the foam system.

TRI-(2-CHLOROISOPROPYL)PHOSPHATE

ID: **13674-84-5**

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

HAZARD SCREENING DATE: **2022-02-09 6:47:06**

?: **5.0000 - 10.0000**

GS: **BM-U**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Flame retardant**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

END

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MUL

US EPA - PPT Chemical Action Plans

TSCA Work Plan chemical - ongoing chemical (risk) assessment

PBT

EHP - San Antonio Statement on BFRs & CFRs

Flame retardant substance class of concern for PB&T & long range transport

SUBSTANCE NOTES: This material is used as a flame retardant in the foam system.

CHLOROTRIFLUOROPROPENE

ID: **102687-65-0**

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

HAZARD SCREENING DATE: **2022-02-09 10:52:32**

?: **5.0000 - 10.0000**

GS: **NoGS**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES: This material is used as a blowing agent in the foam system.		

DIETHYLENE GLYCOL

ID: 111-46-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:07		
%: 3.0000 - 10.0000	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Solvent
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
SUBSTANCE NOTES: This material is a solvent.				

TRIETHYL PHOSPHATE (TEP)

ID: 78-40-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:08		
%: 1.0000 - 7.0000	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: This material is used as a flame retardant in the foam.				

N,N-DIMETHYLCYCLOHEXYLAMINE

ID: 98-94-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:08		
%: 1.0000 - 5.0000	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Catalyst
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters	
SUBSTANCE NOTES: This material is used as a catalyst in the foam system.				

POLYETHYLENE GLYCOL MONO(BRANCHED P-NONYLPHENYL) ETHER

ID: 127087-87-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:11		
%: 1.0000 - 12.0000	GS: BM-1tp	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Chemical for Priority Action
MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
MUL	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - Action Plan in development
END	ChemSec - SIN List	Endocrine Disruption
REP	US EPA - PPT Chemical Action Plans	Reproductive effects
AQU	US EPA - PPT Chemical Action Plans	Highly toxic to aquatic organisms
DEV	US EPA - PPT Chemical Action Plans	Developmental Effects
END	EU - SVHC Authorisation List	Equivalent Concern - Candidate List
SUBSTANCE NOTES: This material is used as a polymer in the foam system.		

UNDISCLOSED		ID: Undisclosed		
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-16 14:16:27		
%: 0.3000 - 5.0000	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Catalyst
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: This material is used as a catalyst in the foam system.				

WATER		ID: 7732-18-5		
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:09		
%: 0.0000 - 5.0000	GS: BM-4	RC: None	NANO: No	SUBSTANCE ROLE: Solvent
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: This material is used as a solvent in the foam.				

UNDISCLOSED		ID: Undisclosed	
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:09	
%: 0.0000 - 15.0000	GS: NoGS	RC: None	NANO: No SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: This material is a polymer in the foam system.			

UNDISCLOSED		ID: Undisclosed		
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HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:10		
%: 0.0000 - 15.0000	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: This material is a polymer in the foam system.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:11	
%: 0.0000 - 5.0000	GS: LT-UNK	RC: None	NANO: No SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: This material is used as a polymer in the foam system.			

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:47:12	
%: 0.0000 - 5.0000	GS: LT-UNK	RC: None	NANO: No SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: This material is used as a polymer in the foam system.			

UNDISCLOSED

ID: **Undisclosed**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-02-09 6:55:27	
%: 0.0000 - 5.0000	GS: LT-UNK	RC: None	NANO: No SUBSTANCE ROLE: Surfactant
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS	
None found		No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: This material is used as a surfactant in the foam system.			

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	UL/GreenGuard Gold Certified		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: BASF Corporation, 1703 Crosspoint Ave, 77054 Houston, Texas, United States CERTIFICATE URL: https://spot.ul.com/main-app/products/detail/6082d2ff1b28a2ad5bfb8f72	ISSUE DATE: 2021-03-24	EXPIRY DATE: 2022-07-28	CERTIFIER OR LAB: UL
CERTIFICATION AND COMPLIANCE NOTES: GREENGUARD and GREENGUARD Gold Certification – SKYTITE C3-3.0 meets the stringent requirements of GREENGUARD Gold, thus ensuring occupant safety through improved indoor air quality. UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Certificate Number: 229639-420			
VOC CONTENT	GreenGuard - Indoor Air Quality Certified		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: BASF Corporation, 1703 Crosspoint Ave, 77054 Houston, Texas, United States CERTIFICATE URL: https://spot.ul.com/main-app/products/detail/6082d2ff1b28a2ad5bfb8f72	ISSUE DATE: 2021-03-24	EXPIRY DATE: 2022-07-28	CERTIFIER OR LAB: UL
CERTIFICATION AND COMPLIANCE NOTES: GREENGUARD and GREENGUARD Gold Certification – SKYTITE C3-3.0 meets the stringent requirements of GREENGUARD Gold, thus ensuring occupant safety through improved indoor air quality. UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Certificate Number: 229639-410			

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.

ELASTOSPRAY 8000A ISOCYANATE	HPD URL: https://www.hpd-collaborative.org/hpd-public-repository/
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Elastospray 8000A Isocyanate is mixed with SKYTITE C3-3.0 S at a 1:1 by volume, to activate the spray foam reaction.	

Section 5: General Notes

SKYTITE C3-3.0 is designed for an application rate of ½ inch minimum to 1½ inch maximum per pass. Once installed and material has cooled it is possible to add additional applications in order to increase the overall installed thickness of SPF. Thicker installations are allowed based on large scale testing. This application procedure is in compliance with the Spray Polyurethane Foam Alliance (SPFA).

SKYTITE C3-3.0 is NOT designed for use as an INTERIOR insulation system. BASF offers a separate line of products for interior insulation applications. For more information, please contact your sales representative. Cold-storage structures such as coolers and freezers demand special design considerations with regard to thermal insulation and moisture-vapor drive. SKYTITE C3-3.0 should NOT be installed in these types of constructions unless the structure was designed by a design professional for specific use as cold storage.

SKYTITE C3-3.0 is designed for installation to most standard construction materials such as wood, wood-based products, plastics, metal and concrete. SKYTITE C3-3.0 has performed successfully when sprayed onto wood substrates down to 50°F using special cold weather application techniques. For heat sink-materials such as metal or concrete, SKYTITE C3-3.0 can be sprayed onto substrates down to 60°F, using a flash pass method. BASF recommends the use of mock-ups or sample spray before starting the full-scale project. This will provide an opportunity to see how all materials are installed and evaluate their properties prior to proceeding. Please consult a BASF Representative for further information about applications using our liquid compounds.

MANUFACTURER INFORMATION

MANUFACTURER: **BASF Corporation**
 ADDRESS: **1703 Crosspoint Avenue**
Houston Texas 77054, United States
 WEBSITE: **https://www.spf.basf.com**

CONTACT NAME: **BASF Corporation**
 TITLE: **Construction and Standards Regulations Specialist**
 PHONE: **1-(800) 706-0712**
 EMAIL: **pmconstruction@basf.com**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
BM-2 Benchmark 2 (use but search for safer substitutes)	
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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.