

CLASSIFICATION: 11 41 23

PRODUCT DESCRIPTION: THIS HPD COVERS NORBEC® PANELS BY NORBEC SYSTEMS INC. NORBEC® PANELS ARE HIGH-ENERGY-EFFICIENCY INSULATED PANELS FOR THE BUILDING OF COLD ROOMS (FREEZERS, REFRIGERATORS, STORAGE SPACE). MORE SPECIFICALLY, THE HPD HAS BEEN PREPARED BASED ON AVERAGE COMPOSITIONS OF NORBEC® (47 IN.) USING A POLYURETHANE FOAM CORE OF 4 INCHES AND A 26 GAUGE THICKNESS FOR STEEL SHEETS. OTHER CSI MASTERFORMAT® DESIGNATIONS THAT APPLY TO NORBEC® PANELS: 11 41 26, 13 21 13, 13 21 26.

Section 1: Summary

CONTENT INVENTORY

- Threshold per material
- 100 ppm
 - 1,000 ppm
 - Per GHS SDS
 - Per OSHA MSDS
 - Other

Residuals and impurities considered in 4 of 4 materials
 see Section 2: Material Notes
 see Section 5: General Notes

Based on the selected Content Inventory Threshold:

Characterized.....	<input checked="" type="radio"/>	<input type="radio"/>
Are the Percent Weight and Role provided for all substances?	Yes	No
Screened.....	<input checked="" type="radio"/>	<input type="radio"/>
Are all substances screened using Priority Hazard Lists with results disclosed?	Yes	No
Identified.....	<input type="radio"/>	<input checked="" type="radio"/>
Are all substances disclosed by Name (Specific or Generic) and Identifier?	Yes	No

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

PRE-PAINTED GALVANIZED STEEL SHEETS [IRON **LT-P1** | END ZINC **LT-P1** | AQU | END | MUL | PHY TITANIUM DIOXIDE **LT-1** | CAN | END TERLON **NoGS** ACRYLATES **NoGS** STRONTIUM CHROMATE **LT-1** | MAM | CAN | AQU | DEV | REP | SKI | MUL | GEN CHROMIUM **LT-P1** | RES | END COPPER **LT-UNK** MANGANESE **LT-P1** | END | MUL | REP NICKEL **LT-1** | MAM | CAN | SKI | AQU | RES | MUL ALUMINUM **LT-P1** | RES | END | PHY CADMIUM **LT-1** | MAM | CAN | AQU | REP | DEV | PBT | GEN | MUL | END | PHY LEAD **LT-1** | MAM | AQU | DEV | REP | CAN | PBT | MUL | END | GEN ANTIMONY **LT-1** | MAM | AQU | CAN POLYVINYLIDENE FLUORIDE (1,1-DIFLUOROETHENE HOMOPOLYMER) **LT-UNK** POLYESTER **NoGS** FORMALDEHYDE, MELAMINE POLYMER, METHYLATED **LT-UNK** ACRYLONITRILE -METHYL-METHACRYLATE -VINYLIDENE CHLORIDE COPOLYMER **LT-P1** | END 2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE **LT-P1** | END]
 INSULATING MATERIAL #3 [POLYURETHANE FOAMS **LT-UNK** 1,1,1,3,3-PENTAFLUOROPROPANE **LT-UNK**] SEALANT #1 [UNDISCLOSED **LT-UNK** UNDISCLOSED **LT-UNK** UNDISCLOSED **BM-2** | MAM | CAN UNDISCLOSED **LT-UNK** UNDISCLOSED **LT-P1** | CAN]
 SEALANT #2 [SILOXANES AND SILICONES, DI-ME, ME HYDROGEN **LT-P1** LIMESTONE; CALCIUM CARBONATE **LT-UNK** POLYDIMETHYLSILOXANES **LT-P1** | PBT 2-BUTANONE, O,O',O''-(METHYLSILYLIDYNE)TRIOXIME (8CI)(9CI) **LT-UNK** FUMED SILICA, CRYSTALLINE-FREE **LT-UNK** 1,2-ETHANEDIAMINE, N-(3-(TRIMETHOXSILYL)PROPYL)-(9CI) **LT-UNK** BUTAN-2-ONE O,O',O''-(VINYLIDYNE)TRIOXIME **BM-1** DIBUTYL TIN DILAURATE **LT-1** | PBT | MUL | END | REP OCTAMETHYLCYCLOTETRASILOXANE (D4) **BM-1** | REP | END | PBT | MUL]

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:

This HPD has been prepared using the Material Content Inventory. Norbec® panels have been screened at 1000 ppm. Two different sealants can be used for the fabrication and/or installation of Norbec® panels that is why they have been both declared under "sealant #1" and "sealant #2".

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

No certifications have been added to this HPD.

<input checked="" type="radio"/> Self-Published*	VERIFIER:	SCREENING DATE: June 28, 2017	EXPIRY DATE*: June 28, 2020
<input type="radio"/> Third Party Verified	VERIFICATION #:	RELEASE DATE: July 21, 2017	* or within 3 months of significant change in product contents
*See HPDC website for details			



Section 2: Content in Descending Order of Quantity

This section lists materials in a product and the substances in each material based on the Inventory Threshold for each material. If residuals or impurities from the manufacturing or extraction processes are considered for a material, these are inventoried and characterized to the extent described in the Material and/or General Notes. Chemical substances are screened against the HPD Priority Hazard Lists for human and environmental health impacts. Screening is based on best available information; "Not Found" does not necessarily mean there is no potential hazard associated with the product or its contents. More information about Priority Hazard Lists and the GreenScreen can be found online: www.hpd-collaborative.org and www.greenscreenchemicals.org.

PRE-PAINTED GALVANIZED STEEL SHEETS

%: 68.1400

HPD URL:

Inventory Threshold: 100 ppm

Residuals Considered: Yes

Material Notes: Different suppliers of galvanized steel and different paints are used for Norbec® panels. Their compositions have been adapted to the variations and ranges may apply. Galvanized steel represents 98,25% to 98,86% of prepainted sheets and the remaining is paint. An average composition of most common paint used for those panels has been used for the HPD preparation.

IRON

ID: 7439-89-6

%: 88.0000 - 98.8600

GS: LT-P1

RC: None

NANO: NO

ROLE: main element

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: See Material Notes.

ZINC

ID: 7440-66-6

%: 0.1500 - 9.0000

GS: LT-P1

RC: None

NANO: NO

ROLE: galvanizing element

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ACUTE AQUATIC

EU - R-phrases

R50 - Very Toxic to Aquatic Organisms

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

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H250 - Catches fire spontaneously if exposed to air

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: See Material Notes.

TITANIUM DIOXIDE

ID: 13463-67-7

%: 0.1500 - 0.4700

GS: LT-1

RC: None

NANO: NO

ROLE: Paint ingredient

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: See Material Notes.

TERLON

ID: 63148-69-6

%: 0.1000 - 0.1300

GS: NoGS

RC: None

NANO: NO

ROLE: Paint ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists	
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SUBSTANCE NOTES: Approximation for "Alkyd polyester resin".

ACRYLATES

ID: 102256-29-1

%: 0.1000 - 0.2000

GS: NoGS

RC: None

NANO: NO

ROLE: Paint ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists	
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SUBSTANCE NOTES: Approximation for "acrylic resin".

STRONTIUM CHROMATE

ID: 7789-06-2

%: 0.0600 - 0.0900

GS: LT-1

RC: None

NANO: NO

ROLE: Paint ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
CANCER	EU - R-phrases	R45 - May cause cancer

ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CANCER	EU - SVHC Authorisation List	Carcinogenic - Banned unless Authorised
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
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - GHS (H-Statements)	H350i - May cause cancer by inhalation
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 2
CANCER	Australia - GHS	H350 - May cause cancer
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male

SUBSTANCE NOTES: See Material Notes.

CHROMIUM

ID: 7440-47-3

%: 0.0000 - 0.6400

GS: LT-P1

RC: None

NANO: NO

ROLE: alloying element

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (ARs) - sensitizer-induced - inhalable forms only

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: See Material Notes.

COPPER

ID: 7440-50-8

%: 0.0000 - 0.2000

GS: LT-UNK

RC: None

NANO: NO

ROLE: alloying element

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

MANGANESE

ID: 7439-96-5

%: 0.0000 - 2.2000

GS: LT-P1

RC: None

NANO: NO

ROLE: alloying element

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: See Material Notes.

NICKEL

ID: 7440-02-0

%: 0.0000 - 0.2000

GS: LT-1

RC: None

NANO: NO

ROLE: alloying element

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN

EU - R-phrases

R23 - Toxic by Inhalation (gas, vapour, dust/mist)

CANCER

EU - R-phrases

R40 - Limited Evidence of Carcinogenic Effects

SKIN SENSITIZE

EU - R-phrases

R43 - May cause sensitization by skin contact

ORGAN TOXICANT

EU - R-phrases

R48: Danger of serious damage to health by prolonged exposure.

ACUTE AQUATIC	EU - R-phrases	R52 - Harmful to Aquatic Organisms
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: See Material Notes.

ALUMINUM

ID: 7429-90-5

%: Impurity/Residual GS: LT-P1 RC: None NANO: NO ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases

SUBSTANCE NOTES: Galvanizing may add trace amounts of aluminum at 0.055w% max, antimony at 0.011w% max and lead at 0.004w% max.

CADMIUM

ID: 7440-43-9

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R23 - Toxic by Inhalation (gas, vapour, dust/mist)
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
MAMMALIAN	EU - R-phrases	R26 - Very Toxic by Inhalation
CANCER	EU - R-phrases	R45 - May cause cancer
ORGAN TOXICANT	EU - R-phrases	R48: Danger of serious damage to health by prolonged exposure.
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
REPRODUCTIVE	EU - R-phrases	R62 - Possible risk of impaired fertility
DEVELOPMENTAL	EU - R-phrases	R63 - Possible risk of harm to the unborn child
CANCER	US EPA - IRIS Carcinogens	(1986) Group B1 - Probable human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
GENE MUTATION	EU - R-phrases	R68 - May cause irreversible effects
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CANCER	EU - SVHC Authorisation List	Carcinogenic - Candidate list
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
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
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
GENE MUTATION	EU - GHS (H-Statements)	H341 - Suspected of causing genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer

REPRODUCTIVE	EU - GHS (H-Statements)	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	New Zealand - GHS	6.6A - Known or presumed human mutagens
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Malaysia - GHS	H350 - May cause cancer
CANCER	Australia - GHS	H350 - May cause cancer
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air

SUBSTANCE NOTES: May be present as impurities in the galvanized steel.

LEAD

ID: 7439-92-1

%: Impurity/Residual GS: LT-1 RC: None NANO: NO ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
DEVELOPMENTAL	EU - R-phrases	R61 - May cause harm to the unborn child

REPRODUCTIVE	EU - R-phrases	R62 - Possible risk of impaired fertility
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CANCER	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CANCER	IARC	Group 2a - Agent is probably Carcinogenic to humans
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (PPT)	Priority PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REPRODUCTIVE	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
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
DEVELOPMENTAL	EU - GHS (H-Statements)	H360Df - May damage the unborn child. Suspected of damaging fertility
REPRODUCTIVE	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
DEVELOPMENTAL	EU - GHS (H-Statements)	H362 - May cause harm to breast-fed children
REPRODUCTIVE	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A

SUBSTANCE NOTES: Galvanizing may add trace amounts of aluminum at 0.055w% max, antimony at 0.011w% max and lead at 0.004w% max. Lead may also be present as an impurity in the steel at a concentration < 1ppm.

ANTIMONY

ID: 7440-36-0

%: Impurity/Residual	GS: LT-1	RC: None	NANO: NO	ROLE: Impurity/Residual
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
ACUTE AQUATIC	EU - R-phrases	R51 - Toxic to Aquatic Organisms
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man

SUBSTANCE NOTES: Galvanizing may add trace amounts of aluminum at 0.055w% max, antimony at 0.011w% max and lead at 0.004w% max.

POLYVINYLIDENE FLUORIDE (1,1-DIFLUOROETHENE HOMOPOLYMER)

ID: 24937-79-9

%: 0.0000 - 0.4000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Paint ingredient
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists
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SUBSTANCE NOTES: PVDF paint only. See Material Notes.

POLYESTER

ID: 113669-95-7

%: 0.0000 - 0.3300	GS: NoGS	RC: None	NANO: NO	ROLE: Paint ingredient
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

FORMALDEHYDE, MELAMINE POLYMER, METHYLATED

ID: 68002-20-0

%: 0.0000 - 0.1100

GS: LT-UNK

RC: None

NANO: NO

ROLE: Paint ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

ACRYLONITRILE -METHYL-METHACRYLATE -VINYLIDENE CHLORIDE COPOLYMER

ID: 25036-25-3

%: 0.0000 - 0.1700

GS: LT-P1

RC: None

NANO: NO

ROLE: Paint ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

EU - Priority Endocrine Disrupters

Category 1 - In vivo evidence of Endocrine Disruption Activity

SUBSTANCE NOTES: Only for PVDF paint. See Material Notes.

2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE

ID: 6846-50-0

%: 0.0000 - 0.1500

GS: LT-P1

RC: None

NANO: NO

ROLE: Paint ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: See Material Notes.

INSULATING MATERIAL #3

%: 31.8600

HPD URL:

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Rigid polyurethane foam. According to the manufacturer there are no impurities, everything is consumed but the blowing agent that may still be present in the final product at a weight percentage of 6% so it was included.

POLYURETHANE FOAMS

ID: 9009-54-5

%: 94.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Main material

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

1,1,1,3,3-PENTAFLUOROPROPANE

ID: 460-73-1

%: 6.0000 GS: LT-UNK RC: None NANO: NO ROLE: blowing agent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

GLOBAL WARMING US EPA - Global Warming Potentials Global Warming Potential greater than 1,000

GLOBAL WARMING IPCC - Global Warming Chemicals Chemicals with Global Warming Potential

SUBSTANCE NOTES: pressurized with Nitrogen

SEALANT #1

%: 0.0000 - 1.0000

HPD URL:

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Butyl sealant. Confidential information have been retained. The exact composition, as well as names and CAS# of substances are protected by a NDA.

UNDISCLOSED

%: 50.0000 - 60.0000 GS: LT-UNK RC: None NANO: NO ROLE: Additive

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

UNDISCLOSED

%: 20.0000 - 30.0000 GS: LT-UNK RC: None NANO: NO ROLE: Reagent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

UNDISCLOSED

%: 10.0000 - 20.0000 GS: BM-2 RC: None NANO: NO ROLE: Solvent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN

EU - GHS (H-Statements)

H304 - May be fatal if swallowed and enters airways

CANCER

MAK

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

SUBSTANCE NOTES: See Material Notes.

UNDISCLOSED

%: 1.0000 - 10.0000

GS: LT-UNK

RC: None

NANO: NO

ROLE: Reagent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

UNDISCLOSED

%: 1.0000 - 5.0000

GS: LT-P1

RC: None

NANO: NO

ROLE: Filler

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

Japan - GHS

Carcinogenicity - Category 1A

SUBSTANCE NOTES: See Material Notes.

SEALANT #2

%: 0.0000 - 1.0000

HPD URL:

Inventory Threshold: 1000 ppm

Residuals Considered: Yes

Material Notes: Silicone based sealant. According to the manufacturer, limestone and fumed silica are encapsulated in the final silicone mix and are not airborne.

SILOXANES AND SILICONES, DI-ME, ME HYDROGEN

ID: 68037-59-2

%: 30.0000 - 70.0000

GS: LT-P1

RC: None

NANO: NO

ROLE: Reagent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

LIMESTONE; CALCIUM CARBONATE

ID: 1317-65-3

%: 10.0000 - 25.0000

GS: LT-UNK

RC: UNK

NANO: NO

ROLE: Colorant

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

POLYDIMETHYLSILOXANES

ID: 63148-62-9

%: 10.0000 - 30.0000 GS: LT-P1 RC: None NANO: NO ROLE: Reagent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PBT EC - CEPA DSL Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans

SUBSTANCE NOTES: See Material Notes.

2-BUTANONE, O,O',O''-(METHYLSILYLIDYNE)TRIOXIME (8CI)(9CI)

ID: 22984-54-9

%: 3.0000 - 5.0000 GS: LT-UNK RC: None NANO: NO ROLE: ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

FUMED SILICA, CRYSTALLINE-FREE

ID: 112945-52-5

%: 3.0000 - 9.0000 GS: LT-UNK RC: None NANO: NO ROLE: Additive

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

1,2-ETHANEDIAMINE, N-(3-(TRIMETHOXYSILYL)PROPYL)-(9CI)

ID: 1760-24-3

%: 0.3000 - 1.0000 GS: LT-UNK RC: None NANO: NO ROLE: ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

BUTAN-2-ONE O,O',O''-(VINYL-SILYLIDYNE)TRIOXIME

ID: 2224-33-1

%: 0.3000 - 1.0000

GS: BM-1

RC: None

NANO: NO

ROLE: ingredient

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Material Notes.

DIBUTYLTIN DILAURATE

ID: 77-58-7

%: 0.3000 - 1.5000

GS: LT-1

RC: None

NANO: NO

ROLE: Catalyst

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PBT

OSPAR - Priority PBTs & EDs & equivalent concern

PBT - Chemical for Priority Action

MULTIPLE

ChemSec - SIN List

CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

ENDOCRINE

ChemSec - SIN List

Endocrine Disruption

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 3 - Severe Hazard to Waters

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: See Material Notes.

OCTAMETHYLCYCLOTETRASILOXANE (D4)

ID: 556-67-2

%: 0.1000 - 0.3000

GS: BM-1

RC: None

NANO: NO

ROLE: reagent

HAZARDS:

AGENCY(IES) WITH WARNINGS:

REPRODUCTIVE

EU - R-phrases

R62 - Possible risk of impaired fertility

ENDOCRINE

EU - Priority Endocrine Disrupters

Category 1 - In vivo evidence of Endocrine Disruption Activity

PBT

EU - ESIS PBT

Under PBT evaluation

PBT

OR DEQ - Priority Persistent Pollutants

Priority Persistent Pollutant - Tier 1

PBT

EC - CEPA DSL

Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)

PBT

EC - CEPA DSL

Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans

RESTRICTED LIST

US EPA - PPT Chemical Action Plans

TSCA Work Plan chemical - Action Plan in development

REPRODUCTIVE

EU - GHS (H-Statements)

H361f - Suspected of damaging fertility

MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	ChemSec - SIN List	Endocrine Disruption
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - ongoing chemical (risk) assessment

SUBSTANCE NOTES: See Material Notes.

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

Section 5: General Notes



MANUFACTURER INFORMATION

MANUFACTURER: Norbec Architectural Inc./Norbec Systems Inc. CONTACT NAME: Daniel Fournier

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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)

UNK 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

Nano Composed of nanoscale particles or nanotechnology

Declaration Level

Self-declared Manufacturer's self-declaration (First Party)

Independent Lab Manufacturer's self-declaration using results from an independent lab

Second Party Verification by trade association or other interested party

Third Party Verification by independent certifier

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 does not provide an assessment of health impacts throughout the product life cycle. It does not provide an assessment of exposure or risk associated with product handling or use. It also does not address potential health impacts of: (i) substances used or created during the manufacturing process unless they remain in the final product, or (ii) substances created after the product is delivered for end use (e.g., if the product burns, degrades, or otherwise changes chemical composition).

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

A disclosure completed in compliance with the HPD Open Standard is referred to as a "Health Product Declaration," or "HPD." 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 Open Standard noted.