

CLASSIFICATION: 09 91 00.00 Finishes: Painting

created via: HPDC Online Builder

PRODUCT DESCRIPTION: Ecologic® Rustex Primer is a premium quality waterborne anti-corrosive primer for application to properly prepared ferrous and non-ferrous metals for industrial, commercial and institutional applications. This product has good corrosion resistance, re-coat tolerance, and adhesion to a wide range of substrates. It is non-flammable, and has low VOC content to meet LEED v4 Low-Emitting Materials standard. This product is listed under MPI categories #107 & #134. This HPD covers Ecologic® Rustex Primer in white. Product Code: 70323

Section 1: Summary

Basic 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

- Considered
- Partially Considered
- Not Considered

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

Are All Substances Above the Threshold Indicated:

Characterized Yes No
 Percent Weight and Role Provided?

Screened Yes No
 Using Priority Hazard Lists with Results Disclosed?

Identified Yes No
 Name and Identifier Provided?

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.

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

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

ECOLOGIC® RUSTEX PRIMER | WATER BM-4 | ACRYLIC POLYMER LT-UNK
 TITANIUM DIOXIDE LT-1 | CAN | END TALC BM-1 | CAN ETHYLENE
 GLYCOL MONOBUTYL ETHER (EGBE) BM-2 | MAM | EYE | SKI | END MICA
 LT-UNK TRIZINC BIS(ORTHOPHOSPHATE) LT-P1 | AQU | MUL ZINC
 PHOSPHATE NoGS SILICA, AMORPHOUS LT-P1 | CAN ALUMINA
 TRIHYDRATE BM-2 | RES ZINC OXIDE BM-1 | AQU | RES | MUL
 UNDISCLOSED LT-UNK SOLVENT-DEWAXED HEAVY PARAFFINIC
 PETROLEUM DISTILLATES (SOLVENT-DEWAXED HEAVY PARAFFINIC
 PETROLEUM DISTILLATES) LT-1 | CAN | MUL AMMONIUM HYDROXIDE LT-
 P1 | SKI | AQU | RES | MUL SODIUM NITRITE LT-P1 | MAM | AQU | MUL |
 END | PHY 1,4-DIISOBUTYL-1,4-DIMETHYLBUTYNYEDIOL LT-UNK
 UNDISCLOSED LT-UNK UNDISCLOSED NoGS QUARTZ LT-1 | CAN
 CHLORITE NoGS]

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 qualifies for the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1). Substances not "Identified" are those considered proprietary to suppliers, and are thus "Undisclosed" on this HPD.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): <100 Regulatory (g/l):
 Does the product contain exempt VOCs: No
 Are ultra-low VOC tints available: N/A

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: Building Product VOC Emission Factors - 70323

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: 2018-01-10
 PUBLISHED DATE: 2018-01-10
 EXPIRY DATE: 2021-01-10

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

ECOLOGIC® RUSTEX PRIMER

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: 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 letters, supplier SDS, and as predicted by process chemistry (Pharos CML).

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

WATER

ID: 7732-18-5

#: 40.0000 - 45.0000 GS: BM-4 RC: None NANO: No ROLE: Diluent, Flow Aid

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

ACRYLIC POLYMER

ID: Undisclosed

#: 20.0000 - 25.0000 GS: LT-UNK RC: None NANO: No ROLE: Resin Binder

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Supplier has shared substance name and CASRN under the terms of a non-disclosure agreement with third-party consultant; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists with results disclosed.

TITANIUM DIOXIDE

ID: 13463-67-7

#: 10.0000 - 15.0000 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 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
--------	-----	--

ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
-----------	---------------------------------------	-------------------------------

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>).

TALC

ID: 14807-96-6

#: 10.0000 - 15.0000	GS: BM-1	RC: None	NANO: No	ROLE: Extender
----------------------	-----------------	-----------------	-----------------	-----------------------

HAZARDS:	AGENCY(IES) WITH WARNINGS:
----------	----------------------------

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

SUBSTANCE NOTES: GreenScreen® Assessment for Talc (CAS# 14807-96-6) assigns the following GreenScreen® Benchmark Scores for Relevant Routes of Exposure: Inhalation (BM-1); Oral (BM-3DG); Dermal (BM-U).

ETHYLENE GLYCOL MONOBUTYL ETHER (EGBE)

ID: 111-76-2

#: 1.0000 - 5.0000	GS: BM-2	RC: None	NANO: No	ROLE: Flow Additive
--------------------	-----------------	-----------------	-----------------	----------------------------

HAZARDS:	AGENCY(IES) WITH WARNINGS:
----------	----------------------------

MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
-----------	----------------	---

MAMMALIAN	EU - R-phrases	R21 - Harmful in Contact with Skin
-----------	----------------	------------------------------------

MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
-----------	----------------	----------------------------

EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
----------------	----------------	--------------------------

SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
-----------------	----------------	--------------------------

SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
-----------------	-------------------------	-------------------------------

EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
----------------	-------------------------	--------------------------------------

ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
-----------	---------------------------------------	-------------------------------

SUBSTANCE NOTES:

MICA

ID: 12001-26-2

#: 1.0000 - 5.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Extender
--------------------	-------------------	-----------------	-----------------	-----------------------

HAZARDS:	AGENCY(IES) WITH WARNINGS:
----------	----------------------------

None Found	No warnings found on HPD Priority lists
------------	---

SUBSTANCE NOTES:

TRIZINC BIS(ORTHOPHOSPHATE)

ID: 7779-90-0

#: **1.0000 - 5.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Pigment, Corrosion Inhibitor**

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
MULTIPLE	German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters

SUBSTANCE NOTES:

ZINC PHOSPHATE

ID: 13847-22-8

#: **1.0000 - 5.0000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Anti-Corrosive Agent**

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

SUBSTANCE NOTES:

SILICA, AMORPHOUS

ID: 7631-86-9

#: **0.5000 - 1.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Extender**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
CANCER	Japan - GHS Carcinogenicity - Category 1A

SUBSTANCE NOTES:

ALUMINA TRIHYDRATE

ID: 21645-51-2

#: **0.5000 - 1.0000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Opacifying Agent**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
RESPIRATORY	AOEC - Asthmagens Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES:

#: **0.5000 - 1.0000** GS: **BM-1** RC: **None** NANO: **No** ROLE: **Anti-Corrosive Component; Residual/Impurity**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
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: May also represent Impurity of 7779-90-0.

UNDISCLOSED

#: **0.5000 - 1.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Coalescing Aid**

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

SUBSTANCE NOTES: Supplier has shared substance name and CASRN under the terms of a non-disclosure agreement with third-party consultant; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

SOLVENT-DEWAXED HEAVY PARAFFINIC PETROLEUM DISTILLATES (SOLVENT-DEWAXED HEAVY PARAFFINIC PETROLEUM DISTILLATES)

#: **0.1000 - 0.5000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Foam Control Agent**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	EU - R-phrases	R45 - May cause cancer
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
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
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: According to Pharos CML, the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract. We are working with our supplier to confirm that this exception applies to this substance. As per supplier SDS, "This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA)."

AMMONIUM HYDROXIDE

ID: 1336-21-6

#: **0.1000 - 0.5000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **pH Adjustment**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN IRRITATION	EU - R-phrases	R34 - Causes burns
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rr&Rs) - irritant-induced & sensitizer-induced
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES:

SODIUM NITRITE

ID: 7632-00-0

#: **0.1000 - 0.5000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Corrosion Inhibitor**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R25 - Toxic if Swallowed
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H272 - May intensify fire; oxidiser

SUBSTANCE NOTES:

1,4-DIISOBUTYL-1,4-DIMETHYLBUTYNEEDIOL

ID: 126-86-3

#: **0.1000 - 0.5000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Surfactant**

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

SUBSTANCE NOTES:

UNDISCLOSED

#: 0.1000 - 0.5000	GS: LT-UNK	RC: None	NANO: No	ROLE: Dispersant
---------------------------	-------------------	-----------------	-----------------	-------------------------

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Supplier has shared substance name and CASRN under the terms of a non-disclosure agreement with third-party consultant; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists with results disclosed.

UNDISCLOSED

#: 0.1000 - 0.5000	GS: NoGS	RC: None	NANO: No	ROLE: Rheology Modifier
---------------------------	-----------------	-----------------	-----------------	--------------------------------

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Supplier has shared substance name and CASRN under the terms of a non-disclosure agreement with third-party consultant; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists with results disclosed.

QUARTZID: **14808-60-7**

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

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	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	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Potential impurity of raw materials (e.g. Mica). Quartz is one of several compounds with warnings restricted to respirable forms (Silica, crystalline - airborne particles of respirable size). 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 Quartz/Silica. This HPD will be updated as appropriate when these guidelines become available. May also represent possible impurity present in other raw materials.

CHLORITEID: **1318-59-8**

#: Impurity/Residual	GS: NoGS	RC: None	NANO: No	ROLE: Impurity/Residual
-----------------------------	-----------------	-----------------	-----------------	--------------------------------

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Chlorite Group Minerals. Potential impurity of Talc based on information provided in supplier SDS.

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

Building Product VOC Emission Factors - 70323

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2016-11-

EXPIRY DATE: 2018-

CERTIFIER OR LAB: Berkeley

APPLICABLE FACILITIES: Cloverdale Paint Inc., Surrey,

27

11-27

Analytical ClearChem

BC Canada

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: Report number: 881-004-02A-Nov2716. Test method: ASTM D 5116-10 (Small Chamber).

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

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Cloverdale Paint Inc. - Cloverdale Paint & Rodda Paint Co.**

ADDRESS: **6107 N Marine Drive**

CONTACT NAME: **Jeff McIntyre**

TITLE: **Business Development Manager**

PHONE: **206.396.7074**

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.