

**CLASSIFICATION:** 09 96 00 High Performance Coatings

**PRODUCT DESCRIPTION:** Specially formulated, one-component, moisture-cured, micaceous iron oxide and zinc filled primer that offers superior bonding to marginally prepared rusty steel and tightly adhered old coatings. This high performance primer is ideal for corrosion resistance with a triple barrier mechanism of zinc, mio and urethane resin built into the dry film. It is suitable as a corrosion resistant primer under certain fireproofing systems. Contact your Tnemec representative for specific information.

## 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.

**MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY**

**GREENSCREEN SCORE | HAZARD TYPE**

**SERIES 394 PERIMEPRIME [ MICACEOUS IRON OXIDE LT-UNK ZINC (ZINC) LT-P1 | AQU | MUL | END | PHY UNDISCLOSED LT-UNK PARACHLOROBENZOTRIFLUORIDE (PCBTF) LT-P1 | MUL AROMATIC HYDROCARBON MIXTURE LT-1 | MAM | GEN | CAN | MUL | END C.I. PIGMENT BROWN 24 LT-UNK DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER LT-UNK | RES | MUL | SKI | EYE | CAN 1,2,4-TRIMETHYLBENZENE BM-2 | AQU | SKI | EYE | MUL TERT-BUTYL ACETATE LT-UNK | PHY TALC BM-1 | CAN POLYMERIC MDI (PMDI) LT-UNK | RES | MUL | CAN CUMENE (CUMENE) LT-1 | CAN | AQU | MAM | END ZINC OXIDE (ZINC OXIDE) BM-1 | RES | AQU | MUL XYLENES (XYLENES) BM-1 | SKI | END | MUL | REP P-TOLUENESULFONYL ISOCYANATE LT-UNK | SKI | EYE | RES DIPHENYLMETHANE-2,2-DIISOCYANATE MONOMER LT-UNK | MUL | SKI | EYE | RES | CAN DIETHYLBENZENE LT-P1 | 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:

Material disclosure is per GHS SDS requirements. Residuals and impurities are reported when disclosed on supplier SDS and they exceed the GHS reporting threshold. One material is undisclosed in Section 2. The identity of this material is held as a trade secret; no hazards were found on the HPD database for it's associated CAS number.

### VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 203

Regulatory (g/l): 239

Does the product contain exempt VOCs: Yes

Are ultra-low VOC tints available: N/A

### CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: CDPH/EHLB Standard Method v1.1 (2010) Emissions Testing

#### CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes  
 No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-02-28

PUBLISHED DATE: 2018-04-04

EXPIRY DATE: 2021-02-28



## 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](http://www.hpd-collaborative.org/hpd-2-1-standard)

### SERIES 394 PERIMEPRIME

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are reported when disclosed on supplier SDS and they exceed the GHS reporting threshold.

OTHER PRODUCT NOTES: This HPD covers the product as applied without thinning. The percentage range given for Micaceous Iron Oxide is greater than 20% in order to match the level of disclosure given on the GHS Safety Data Sheet for this product.

#### MICACEOUS IRON OXIDE

ID: 1317-60-8

%: 30.0000 - 60.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Pigment
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret. The range given is greater than 20% in order to match the level of disclosure given on the GHS Safety Data Sheet for this product.

#### ZINC (ZINC)

ID: 7440-66-6

%: 10.0000 - 30.0000	GS: LT-P1	RC: None	NANO: No	ROLE: Pigment
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

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

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

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: The exact percentage (concentration) of composition has been withheld as a trade secret.

%: **1.0000 - 10.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Binder**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

### PARACHLOROBENZOTRIFLUORIDE (PCBTF)

ID: 98-56-6

%: **1.0000 - 10.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Solvent**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: This substance is VOC-exempted by the EPA. The exact percentage (concentration) of composition has been withheld as a trade secret.

### AROMATIC HYDROCARBON MIXTURE

ID: 64742-95-6

%: **1.0000 - 10.0000** GS: **LT-1** 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

GENE MUTATION

EU - GHS (H-Statements)

H340 - May cause genetic defects

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

GENE MUTATION

EU - REACH Annex XVII CMRs

Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic 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

EU - Annex VI CMRs

Carcinogen Category 1B - Presumed Carcinogen based on animal evidence

GENE MUTATION

EU - Annex VI CMRs

Mutagen - Category 1B

GENE MUTATION

Australia - GHS

H340 - May cause genetic defects

CANCER

Australia - GHS

H350 - May cause cancer

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

**C.I. PIGMENT BROWN 24**

ID: 68186-90-3

%: **1.0000 - 10.0000**      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: The exact percentage (concentration) of composition has been withheld as a trade secret.

**DIPHENYLMETHANE DIISOCYANATE (MDI) REACTIVE MONOMER**

ID: 101-68-8

%: **1.0000 - 10.0000**      GS: **LT-UNK**      RC: **None**      NANO: **No**      ROLE: **Binder**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (G) - generally accepted

RESTRICTED LIST

US EPA - PPT Chemical Action Plans

EPA Chemical of Concern - Action Plan published

SKIN IRRITATION

EU - GHS (H-Statements)

H315 - Causes skin irritation

SKIN SENSITIZE

EU - GHS (H-Statements)

H317 - May cause an allergic skin reaction

EYE IRRITATION

EU - GHS (H-Statements)

H319 - Causes serious eye irritation

RESPIRATORY

EU - GHS (H-Statements)

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

CANCER

EU - GHS (H-Statements)

H351 - Suspected of causing cancer

RESPIRATORY

US EPA - PPT Chemical Action Plans

Inhalation sensitizer causing asthma and lung damage

CANCER

MAK

Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

RESPIRATORY

MAK

Sensitizing Substance Sah - Danger of airway &amp; skin sensitization

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

**1,2,4-TRIMETHYLBENZENE**

ID: 95-63-6

%: **1.0000 - 10.0000**      GS: **BM-2**      RC: **None**      NANO: **No**      ROLE: **Solvent**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CHRON AQUATIC

EU - GHS (H-Statements)

H411 - Toxic to aquatic life with long lasting effects

SKIN IRRITATION

EU - GHS (H-Statements)

H315 - Causes skin irritation

EYE IRRITATION

EU - GHS (H-Statements)

H319 - Causes serious eye irritation

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

### TERT-BUTYL ACETATE

ID: 540-88-5

#: **1.0000 - 10.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Solvent**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H225 - Highly flammable liquid and vapour

SUBSTANCE NOTES: This substance is VOC-exempted by the EPA. The exact percentage (concentration) of composition has been withheld as a trade secret.

### TALC

ID: 14807-96-6

#: **1.0000 - 10.0000** GS: **BM-1** 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: The exact percentage (concentration) of composition has been withheld as a trade secret.

### POLYMERIC MDI (PMDI)

ID: 9016-87-9

#: **1.0000 - 10.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Binder**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY AOEC - Asthmagens Asthmagen (G) - generally accepted  
RESTRICTED LIST US EPA - PPT Chemical Action Plans EPA Chemical of Concern - Action Plan published  
RESPIRATORY US EPA - PPT Chemical Action Plans Inhalation sensitizer causing asthma and lung damage  
CANCER MAK Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels  
RESPIRATORY MAK Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

### CUMENE (CUMENE)

ID: 98-82-8

#: **0.1000 - 1.0000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Solvent**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER IARC Group 2b - Possibly carcinogenic to humans

CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

### ZINC OXIDE (ZINC OXIDE)

ID: 1314-13-2

#: **0.1000 - 1.0000**      GS: **BM-1**      RC: **None**      NANO: **No**      ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

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: The exact percentage (concentration) of composition has been withheld as a trade secret.

### XYLENES (XYLENES)

ID: 1330-20-7

#: **0.1000 - 1.0000**      GS: **BM-1**      RC: **None**      NANO: **No**      ROLE: **Solvent**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
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: The exact percentage (concentration) of composition has been withheld as a trade secret.

### P-TOLUENESULFONYL ISOCYANATE

ID: 4083-64-1

#: **0.1000 - 1.0000**      GS: **LT-UNK**      RC: **None**      NANO: **No**      ROLE: **Moisture Scavenger**

HAZARDS: AGENCY(IES) WITH WARNINGS:

SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

### DIPHENYLMETHANE-2,2-DIISOCYANATE MONOMER

ID: 26447-40-5

#: 0.1000 - 1.0000 GS: LT-UNK RC: None NANO: No ROLE: Binder

HAZARDS: AGENCY(IES) WITH WARNINGS:

RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage

SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

### DIETHYLBENZENE

ID: 25340-17-4

#: 0.1000 - 1.0000 GS: LT-P1 RC: None NANO: No ROLE: Solvent

HAZARDS: AGENCY(IES) WITH WARNINGS:

MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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SUBSTANCE NOTES: The exact percentage (concentration) of composition has been withheld as a trade secret.

## 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/EHLB Standard Method v1.1 (2010) Emissions Testing

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2015-**

EXPIRY DATE:

CERTIFIER OR LAB: **UL**

APPLICABLE FACILITIES: **Approved for Classroom and**

**03-04**

**Environment**

**Private Office Scenario**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **UL Environment Report # 18104-03**

## 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.*

### F041-0049 THINNER CLEAR

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

F041-0049 is the recommended thinner for low VOC applications. It is used to adjust application viscosity. The VOC of F041-0049 is 0 g/L. This thinner consists of 100% EPA VOC exempted solvent and has a Greenscreen score of LT-P1. Recommended usage level is 0-10% by volume.

## Section 5: General Notes

This HPD covers the product as applied without thinning. See Section 4 for information on thinning.





## MANUFACTURER INFORMATION

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MANUFACTURER: **Tnemec Company, Inc.**  
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**Kansas City MO 64120, United States**  
WEBSITE: **tnemec.com**

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TITLE: **Group Leader, Product Development**  
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## KEY

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**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

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

### GreenScreen (GS)

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible Benchmark 1
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator Likely Benchmark 1
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> Unknown (no data on List Translator Lists)
<b>BM-U</b> 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.*