

CLASSIFICATION: 09 96 00 High Performance Coatings

PRODUCT DESCRIPTION: A low VOC, fluoropolymer coating that provides an ultra-durable finish with user friendly brush, roll and conventional spray application. It has outstanding color and gloss retention even in the most severe exposures. Under certain conditions, it may be used to restore aged fluoropolymer coil applied coatings or for OEM applications. Contact Tnemec Technical Services or your local Tnemec representative for details.

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 V701 LOW VOC HYDROFLON [BARIUM SULFATE BM-2 | CAN FLUOROPOLYMER NoGS PARACHLOROBENZOTRIFLUORIDE (PCBTF) LT-P1 | MUL HEXAMETHYLENE DIISOCYANATE (HDI) POLYMER LT-P1 TERT-BUTYL ACETATE LT-UNK | PHY SILICA, AMORPHOUS LT-P1 | CAN METHYL N-AMYL KETONE BM-U DEFOAMERS LT-P1 | PBT XYLENE BM-1 | SKI | END | MUL | REP ACETONE LT-P1 | PHY | EYE | END | DEL PROPRIETARY LT-P1 | MUL PROPRIETARY LT-P1 | PBT | MUL PETROLEUM SOLVENT (NAPHTHA) LT-1 | MAM | GEN | CAN | MUL | END BISMUTH VANADATE LT-P1 | MUL BROWN PIGMENT LT-UNK BLUE PIGMENT LT-1 | RES | CAN | GEN RED IRON OXIDE BM-2 | CAN YELLOW IRON OXIDE LT-UNK BLACK PIGMENT LT-UNK PHTHALOCYANINE GREEN LT-UNK RED PIGMENT LT-UNK RED PIGMENT LT-UNK ALUMINUM HYDROXIDE BM-2 | RES AMORPHOUS SILICA LT-UNK TITANIUM DIOXIDE LT-1 | CAN | END ORANGE PIGMENT NoGS]

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.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 42 Regulatory (g/l): 66
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 Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario
VOC content: SCAQMD Rule 1113 Architectural Coatings - Concrete curing compounds, Industrial Maintenance (IM) Coatings, Zinc-Rich IM Primers, Primers, Sealers, and Undercoaters, including Quick-Dry Primers, Sealers, and Undercoaters and Specialty Primers, Rust Prevent

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

Yes

PREPARER: Self-Prepared

VERIFIER:

SCREENING DATE: 2018-10-03

PUBLISHED DATE:



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

SERIES V701 LOW VOC HYDROFLON

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.

BARIUM SULFATE

ID: 7727-43-7

%: 10.0000 - 30.0000	GS: BM-2	RC: None	NANO: No	ROLE: Pigment
----------------------	----------	----------	----------	---------------

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

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

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

FLUOROPOLYMER

ID: Undisclosed

%: 10.0000 - 30.0000	GS: NoGS	RC: None	NANO: No	ROLE: Resin
----------------------	----------	----------	----------	-------------

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: The exact percentage (concentration) of composition and CAS number have been withheld as a trade secret.

PARACHLOROBENZOTRIFLUORIDE (PCBTF)

ID: 98-56-6

%: 10.0000 - 30.0000	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 component is VOC Exempt. The exact percentage (concentration) of composition has been withheld as a trade

secret.

HEXAMETHYLENE DIISOCYANATE (HDI) POLYMER

ID: 28182-81-2

#: 1.0000 - 10.0000 GS: LT-P1 RC: None NANO: No ROLE: Resin

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.

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 component is VOC Exempt. The exact percentage (concentration) of composition has been withheld as a trade secret.

SILICA, AMORPHOUS

ID: 7631-86-9

#: 1.0000 - 10.0000 GS: LT-P1 RC: None NANO: No ROLE: Pigment

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

Japan - GHS

Carcinogenicity - Category 1A

CANCER

Australia - GHS

H350i - May cause cancer by inhalation

SUBSTANCE NOTES: Product is in liquid or paste form and health hazards related to dust are not considered significant. The exact percentage (concentration) of composition has been withheld as a trade secret.

METHYL N-AMYL KETONE

ID: 110-43-0

#: 0.1000 - 10.0000 GS: BM-U RC: None NANO: No ROLE: Solvent

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.

DEFOAMERS

ID: 63148-62-9

#: 0.1000 - 10.0000 GS: LT-P1 RC: None NANO: No ROLE: Additive

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans

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

XYLENE

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.

ACETONE

ID: 67-64-1

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

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEVELOPMENTAL	MAK	Pregnancy Risk Group B

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

PROPRIETARY

ID: **Undisclosed**

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

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: The exact percentage (concentration) of composition and chemical identity have been withheld as a trade secret.

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
%: 0.1000 - 1.0000	GS: LT-P1	RC: None NANO: No ROLE: Additive
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SUBSTANCE NOTES: The exact percentage (concentration) of composition and chemical identity have been withheld as a trade secret.		

PETROLEUM SOLVENT (NAPHTHA)

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
%: 0.0100 - 1.0000	GS: LT-1	RC: None NANO: No ROLE: Solvent
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.		

BISMUTH VANADATE

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
%: 0.0000 - 20.0000	GS: LT-P1	RC: None NANO: No ROLE: Pigment
MULTIPLE	German FEA - Substances Hazardous to	Class 3 - Severe Hazard to Waters

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

BROWN PIGMENTID: **Undisclosed**

#: **0.0000 - 20.0000** 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 and CAS number have been withheld as a trade secret.

BLUE PIGMENTID: **Undisclosed**

#: **0.0000 - 20.0000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (G) - generally accepted

CANCER

MAK

Carcinogen Group 2 - Considered to be carcinogenic for man

RESPIRATORY

MAK

Sensitizing Substance Sah - Danger of airway & skin sensitization

GENE MUTATION

MAK

Germ Cell Mutagen 3a

SUBSTANCE NOTES: Product is in liquid or paste form and health hazards related to dust are not considered significant. The exact percentage (concentration) of composition and CAS number have been withheld as a trade secret.

RED IRON OXIDEID: **1309-37-1**

#: **0.0000 - 20.0000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

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

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

YELLOW IRON OXIDEID: **51274-00-1**

#: **0.0000 - 20.0000** 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.

BLACK PIGMENT

ID: **Undisclosed**

#: **0.0000 - 20.0000** 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 and CAS number have been withheld as a trade secret.

PHTHALOCYANINE GREEN

ID: **1328-53-6**

#: **0.0000 - 20.0000** 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.

RED PIGMENT

ID: **Undisclosed**

#: **0.0000 - 20.0000** 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 and CAS number have been withheld as a trade secret.

RED PIGMENT

ID: **Undisclosed**

#: **0.0000 - 20.0000** 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 and CAS number have been withheld as a trade secret.

ALUMINUM HYDROXIDE

ID: **21645-51-2**

#: **0.0000 - 10.0000** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Product is in liquid or paste form and health hazards related to dust are not considered significant. The exact percentage (concentration) of composition has been withheld as a trade secret.

AMORPHOUS SILICA

ID: 112926-00-8

#: 0.0000 - 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.

TITANIUM DIOXIDE

ID: 13463-67-7

#: 0.0000 - 20.0000 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

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

CANCER

MAK

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

SUBSTANCE NOTES: Product is in liquid or paste form and health hazards related to dust are not considered significant. The exact percentage (concentration) of composition has been withheld as a trade secret.

ORANGE PIGMENT

ID: Undisclosed

#: 0.0000 - 20.0000 GS: NoGS 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 and CAS number have been withheld as a trade secret. This substance doesn't have a GreenScreen Score.

Section 3: Certifications and Compliance

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

VOC EMISSIONS

CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2016-**

EXPIRY DATE:

CERTIFIER OR LAB: **UL**

APPLICABLE FACILITIES: **Approved for Classroom and Private Office Scenario**

05-11

Environment

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **UL Environment Report # 18352-01 Disclaimer: This untested product contains different colors or pigments, but belongs to the same product group as the tested product (e.g. Series V700 HydroFlon). Based on this information, Series 1071V Fluoronar meets the requirements of CDPH/EHLB Standard Method v1.1-2010 Section 01350).**

VOC CONTENT

SCAQMD Rule 1113 Architectural Coatings - Concrete curing compounds, Industrial Maintenance (IM) Coatings, Zinc-Rich IM Primers, Primers, Sealers, and Undercoaters, including Quick-Dry Primers, Sealers, and Undercoaters and Specialty Primers, Rust Prevent

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2018-**

EXPIRY DATE:

CERTIFIER OR LAB: **Tnemec**

APPLICABLE FACILITIES: **All**

10-01

Company, Inc.

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **Series 1070V will meet the 100 g/L VOC limit for Industrial Maintenance coatings when thinned with F041-0065 thinner.**

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.

F041-0065

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

F041-0065 is the recommended thinner for low VOC applications. It is used to adjust application viscosity. This thinner consists of 100% tert-butyl acetate and has a Greenscreen score of LT-UNK. Recommended usage level is 10% by volume.

Section 5: General Notes

This HPD encompasses the product as applied without thinning.



MANUFACTURER INFORMATION

MANUFACTURER: **Tnemec Company, Inc.**
ADDRESS: **6800 Corporate Drive**
Kansas City MO 64120, United States
WEBSITE: **www.tnemec.com**

CONTACT NAME: **Laura Burton**
TITLE: **Group Leader - Product Development**
PHONE: **(816)326-4658**
EMAIL: **burton@tnemec.com**

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

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

GreenScreen (GS)

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

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

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

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.