Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Name: Semi Gloss Black Baked Phenolic Coating Product Code: B-55A

MANUFACTURER: Heresite Protective TELEPHONE NUMB

Coatings, LLC 822 S. 14th Street Manitowoc, WI 54220 TELEPHONE NUMBER: 1 (920) 684-6646 FAX NUMBER: 1 (920) 684-0110

EMERGENCY PHONE: CHEMTREC

1 (800) 424-9300

E-MAIL ADDRESS OF PERSON RESPONSIBLE: peter@heresite.com

Product Use: Industrial and Commercial Coatings, primary application to metal.

Not recommended for: Any other application

SECTION 2: HAZARDS IDENTIFICATION

GHS Ratings:

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >=
		2.3 < 4.0 or persistent inflammation
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after
		exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Mutagen	1B	Known to produce heritable mutations in human germ
		cellsSubcategory 1B, Positive results: In vivo heritable germ
		cell tests in mammals, Human germ cell tests, In vivo
		somatic mutagenicity tests, combined with some evidence of
		germ cell mutagenicity
Carcinogen	1A	Known Human Carcinogen Based on human evidence
Reproductive toxin	1A	Based on human evidence
Organ toxin single	2	Presumed to be harmful to human health- Animal studies
exposure		with significant toxic effects relevant to humans at generally
		moderate exposure (guidance) - Human evidence in
		exceptional cases
Aquatic toxicity	C1	Acute toxicity <= 1.00 mg/l and lack of rapid degradability
		and log Kow >= 4 unless BCF < 500

Signal Word: Danger



GHS Hazards

H225	Highly flammable liquid and vapour
H303	May be harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H340	May cause genetic defects
H350	May cause cancer

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H360 May damage fertility or the unborn child H371 May cause damage to organs

H410 Very toxic to aquatic life with long lasting effects

GHS Precautions

P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P210 Keep away from heat/sparks/open flames/hot surfaces No smoking Keep container tightly closed P233 P240 Ground/bond container and receiving equipment P241 Use explosion-proof electrical/ventilating/light/equipment P242 Use only non-sparking tools P243 Take precautionary measures against static discharge P260 Do not breathe dust/fume/gas/mist/vapours/spray P264 Wash hands thoroughly after handling P270 Do not eat, drink or smoke when using this product P273 Avoid release to the environment P280 Wear protective gloves/protective clothing/eye protection/face protection P281 Use personal protective equipment as required P310 Immediately call a POISON CENTER or doctor/physician P312 Call a POISON CENTER or doctor/physician if you feel unwell P321 Specific treatment (see SDS) P362 Take off contaminated clothing and wash before reuse P391 Collect spillage P302+P352 IF ON SKIN: Wash with plenty of soap and water. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 If exposed or concerned: Get medical advice/attention P309+P311 IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician P332+P313 If skin irritation occurs: Get medical advice / attention

P370+P378 In case of fire: Use CO2, dry chemical, or foam for extinction.
P405 Store locked up

P403+P235 Store in a well-ventilated place. Keep cool

P501 Dispose of contents/container to in accordance with

local/regional/national/international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight Concentration %
Phenolic resin	9003-35-4	20.00% - 30.00%
Ethanol	64-17-5	10.00% - 20.00%
Phosphate Plasticizer	1330-78-5	10.00% - 20.00%
Black Pigment	8021-99-6	5.00% - 10.00%
Acetone	67-64-1	5.00% - 10.00%
Phenol	108-95-2	1.00% - 5.00%
Carbon Black	1333-86-4	1.00% - 5.00%
Butanol	71-36-3	1.00% - 5.00%
Formaldehyde	50-00-0	0.10% - 1.00%

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SECTION 4 - FIRST AID MEASURES

General Advice

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen if a qualified operator is available. Get medical attention.

Eye Contact

Immediately flush eyes with large amounts of water for at least 20 minutes, while holding eyelids open. Obtain medical attention immediately, as a precaution.

Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

If person is conscious, give them several glasses of water to drink. Do NOT induce vomiting unless directed to do so by medical personnel. Obtain immediate medical attention.

Most important symptoms and effects, both acute and delayed

No information available

Indication of any immediate medical attention and special treatment needed

Consult a physician

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media Suitable extinguishing media

Carbon Dioxide, Dry Chemical, Foam

Unsuitable extinguishing media

None identified

Special hazards arising from the substance or mixture

None identified

Advice for firefighters

No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Keep people at a distance and stay on the windward side.

Ensure adequate ventilation.

Keep away from ignition sources.

Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Inform respective authorities in case product reaches water or sewage system.

Prevent from spreading (e.g. by damning-in or oil barriers).

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Keep dirty washing solution for appropriate disposal.

Methods and material for containment and cleaning up:

Ensure adequate ventilation and proper training.

Absorb with liquid-binding non combustible material (e.g. sand).

Clean the accident area carefully.

Send for recovery or disposal in suitable containers.

Reference to other sections:

See Section 2, 7, 8 and 13

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

See Section 2

Conditions for safe storage:

Store in a well-ventilated place.

Keep cool.

Store with only compatible materials.

Specific end uses(s):

See Section 1

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Phenolic resin 9003-35-4	Not Established	Not Established	Not Established
Ethanol 64-17-5	1000 ppm TWA; 1900 mg/m3 TWA	1000 ppm STEL	NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA
Phosphate Plasticizer 1330-78-5	Not Established	Not Established	Not Established
Black Pigment 8021-99-6	Not Established	Not Established	Not Established
Acetone 67-64-1	1000 ppm TWA; 2400 mg/m3 TWA	500 ppm STEL 250 ppm TWA	NIOSH: 250 ppm TWA; 590 mg/m3 TWA
Phenol 108-95-2	5 ppm TWA; 19 mg/m3 TWA	5 ppm TWA	NIOSH: 5 ppm TWA; 19 mg/m3 TWA 15.6 ppm Ceiling (15 min); 60 mg/m3 Ceiling (15 min)
Carbon Black 1333-86-4	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)
Butanol 71-36-3	100 ppm TWA; 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling

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Formaldehyde	0.75 ppm TWA	0.3 ppm Ceiling	NIOSH: 0.016 ppm TWA
50-00-0			0.1 ppm Ceiling (15 min)

Additional information about design of technical systems:

Engineering controls should be used as a primary means to control exposures.

Make available emergency shower and eye wash at the workplace according to appropriate standards.

A workplace risk assessment must be carried out in order to determine the corrective engineering control and organizational measures and personal protective equipment.

No further data; see Section 7.

Exposure controls

Appropriate engineering controls:

No data available

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Take off immediately all contaminated clothing.

Launder work clothing regularly.

Wash hands before breaks and at the end of the work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Do not eat, drink or smoke while working to limit potential ingestion of chemicals.

Personal Protective Equipment

Eye and Face Protection:

Wear eye protection/face protection.

Skin Protection:

Wear protective gloves/protective clothing.

Hand Protection:

The glove material has to be impermeable and resistant to the product.

Due to missing tests no recommendation to the glove material can be given for the product.

Selection of the glove material on consideration of the pnetration times, rates of diffusion and the degradation.

Respiratory Protection:

Engineering controls should be used as primary means to control exposures. Local exhaust ventilation is required unless used in a closed system. For laboratory use, handle in a lab fume hood.

If the applicable Occupational Exposure Level (OEL) is exceeded, wear a NIOSH certified respiratory protection equipment meeting US requirements (1910.134 Occupational Safety and Health Administration, Personal Protective Equipment, Respiratory Protection) with a protection factor sufficient to control exposures to below the OEL.

Environmental Exposure Controls:

See Section 6.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: No Data Found	Odor: No Data Found
Vapor Pressure: 63.0 mmHg	Odor threshold: No Data Found

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Vapor Density: 2.9

Specific Gravity 1.13 Melting point: No Data Found

Freezing point: No Data Found Solubility: No Data Found

Boiling range: No Data Found Flash point: 57 F,14 C

Evaporation rate: No Data Found Flammability: No Data Found

Explosive Limits: No Data Found Partition coefficient (n- No Data Found

octanol/water):

pH: No Data Found

Autoignition temperature: No Data Found Decomposition temperature: No Data Found

Viscosity: No Data Found Grams VOC less water: No Data Found

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

No known hazards with respect to reactivity when handled and stored according to provisions.

Chemical Stability:

Stable under recommended storage and handling conditions.

Thermal decomposition / conditions to avoid:

Avoid exposure to heat, sources of ignition, and open flame. No decomposition if used according to specifications.

Possibility of hazardous reactions:

No data available.

Conditions to avoid:

High Temperatures.

Heat, flames and sparks.

See section 2.

Incompatible materials:

No further information available.

Hazardous decomposition products:

In case of fire: Carbon Dioxide, Carbon Monoxide, Hydrocarbons

SECTION 11: TOXICOLOGICAL INFORMATION

Mixture Toxicity

Oral Toxicity LD50: 3,078mg/kg Inhalation Toxicity LC50: 345mg/L

Component Toxicity

108-95-2 Phenol

Oral LD50: 340 mg/kg (Rat) Dermal LD50: 630 mg/kg (Rabbit) Inhalation LC50: 900 mg/kg (rat)

1333-86-4 Carbon Black

Dermal LD50: 3,000 mg/kg (Rabbit)

71-36-3 Butanol

Oral LD50: 700 mg/kg (Rat) Dermal LD50: 3,402 mg/kg (Rabbit)

50-00-0 Formaldehyde

Oral LD50: 100 mg/kg (Rat) Dermal LD50: 270 mg/kg (Rabbit) Inhalation LC50: 1 mg/L (Rat)

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.

Routes of Entry:

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Inhalation Skin Contact Eye Contact Ingestion

Exposure to this material may affect the following organs:

Blood Eyes Kidneys Liver Central Nervous System Reproductive System

Skin GI Tract Respiratory System Auditory System

Effects of Overexposure

Toxic if inhaled.

Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract

Toxic if absorbed through skin. Causes skin burns

Causes eye burns Toxic if swallowed

Inhalation May be harmful if inhaled. Causes respiratory tract irritation..

Skin Contact Harmful if absorbed through skin. Causes skin irritation

Eyes Irritating to eyes.

Ingestion Harmful if swallowed

May be harmful if inhaled. Causes respiratory tract irritation..

May be harmful if absorbed through skin. Causes skin irritation.

...

May cause eye irritation.

May be harmful if swallowed

Irritating to eyes.

CAS Number

50-00-0

<u>Description</u> % Weight Carcinogen Rating
Formaldehyde 1 to 1.0% Formaldehyde

ormaldehyde 1 to 1.0% Formaldehyde: NIOSH: potential occupational

carcinogen
IARC: Human
carcinogen

OSHA: listed

 1333-86-4 Carbon Black 1 to 5% Carbon Black: NIOSH:

potential occupational

carcinogen

IARC: Possible human

carcinogen OSHA: listed

64-17-5 Ethanol: IARC: Human

carcinogen OSHA: listed

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

No ecotoxicological data for the substance itself are available.

Persistence and degradability:

No further relevant information available.

Bioaccumulative potential:

No further relevant information available.

Mobility in soil:

No further relevant information available

Results of PBT and VPvB assessment:

No data available

Other adverse effects:

No further relevant information available.

Component Ecotoxicity

Ethanol 96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50

Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas:

13400 - 15100 mg/L [flow-through]

48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 48 Hr EC50 Daphnia magna: 2

mg/L [Static]

Phosphate Plasticizer 96 Hr LC50 Oncorhynchus mykiss: 0.21 - 0.32 mg/L [flow-through] (0.2 g); 96 Hr

LC50 Oncorhynchus mykiss: 3.3 - 6.2 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 0.1 - 0.22 mg/L [flow-through] (0.6 g); 96 Hr LC50 Lepomis macrochirus: 20.4 - 41.2 mg/L [static]; 96 Hr LC50 Oryzias latipes: 3.2 - <10 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata: 4.8 - 6.4 mg/L [semi-static]

Acetone 96 Hr LC50 Oncorhynchus mykiss: 4.74 - 6.33 mL/L; 96 Hr LC50 Pimephales

promelas: 6210 - 8120 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 8300

mg/L

48 Hr EC50 Daphnia magna: 10294 - 17704 mg/L [Static]; 48 Hr EC50 Daphnia

magna: 12600 - 12700 mg/L

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Phenol 96 Hr LC50 Pimephales promelas: 11.9 - 50.5 mg/L [flow-through]; 96 Hr LC50

Pimephales promelas: 20.5 - 25.6 mg/L [static]; 96 Hr LC50 Pimephales

promelas: 32 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 5.449 - 6.789 mg/L [flowthrough]; 96 Hr LC50 Oncorhynchus mykiss: 7.5 - 14 mg/L [static]; 96 Hr LC50

Oncorhynchus mykiss: 4.23 - 7.49 mg/L [semi-static]; 96 Hr LC50

Oncorhynchus mykiss: 5.0 - 12.0 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.5 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 11.9 - 25.3 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 11.5 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata: 34.09 - 47.64 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 31 mg/L [semi-static]; 96 Hr LC50 Brachydanio rerio: 27.8 mg/L; 96 Hr LC50 Cyprinus carpio: 0.00175 mg/L [semi-static]; 96 Hr LC50 Oryzias latipes: 33.9 - 43.3 mg/L

[flow-through]; 96 Hr LC50 Oryzias latipes: 23.4 - 36.6 mg/L [static]

48 Hr EC50 Daphnia magna: 4.24 - 10.7 mg/L [Static]; 48 Hr EC50 Daphnia

magna: 10.2 - 15.5 mg/L

96 Hr EC50 Pseudokirchneriella subcapitata: 46.42 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.0188 - 0.1044 mg/L [static]; 72 Hr EC50

Desmodesmus subspicatus: 187 - 279 mg/L [static]

Carbon Black LC50-Danio Rerio (Zebra Fish) - 1000mg/l - 96h

> Daphnia Magna (Water Flea) - 5600mg/l - 24h EC50-Desmodesmus Subspicatus - 10000mg/l - 72h

Butanol 96 Hr LC50 Pimephales promelas: 1730 - 1910 mg/L [static]: 96 Hr LC50

Pimephales promelas: 1740 mg/L [flow-through]; 96 Hr LC50 Lepomis

macrochirus: 100000 - 500000 μg/L [static]; 96 Hr LC50 Pimephales promelas:

1910000 µg/L [static]

48 Hr EC50 Daphnia magna: 1983 mg/L; 48 Hr EC50 Daphnia magna: 1897 -

2072 mg/L [Static]

96 Hr EC50 Desmodesmus subspicatus: >500 mg/L; 72 Hr EC50 Desmodesmus

subspicatus: >500 mg/L

Formaldehyde 96 Hr LC50 Pimephales promelas: 22.6 - 25.7 mg/L [flow-through]; 96 Hr LC50

> Lepomis macrochirus: 1510 µg/L [static]; 96 Hr LC50 Brachydanio rerio: 41 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.032 - 0.226 mL/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 100 - 136 mg/L [static]; 96 Hr LC50 Pimephales

promelas: 23.2 - 29.7 mg/L [static]

48 Hr LC50 Daphnia magna: 2 mg/L; 48 Hr EC50 Daphnia magna: 11.3 - 18 mg/L

[Static]

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods:

Waste material must be disposed of I/A/W Federal, State & Local environmental control regulations. Incineration is a recommended technology. Empty containers must be handled with care due to product residue. Decontaminate containers prior to disposal. Do not heat/cut empty container with electric or gas torch.

SECTION 14: TRANSPORT INFORMATION

Environmental hazards:

No information available

Special precautions for users:

No information available.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

Not required, not intended to be carried in bulk tankers.

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Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
IATA	Paint	1263	II	3
IMDG	Paint	1263	II	3
USDOT	Paint	1263	II	3

SECTION 15: REGULATORY INFORMATION

Classification:

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

50-00-0 Formaldehyde 0.1 to 1.0 % 1333-86-4 Carbon Black 1 to 5 % 64-17-5 Ethanol 10 to 20 %

Clean Air Act

50-00-0 Formaldehyde 0.1 to 1.0 % 71-36-3 Butanol 1 to 5 % 108-95-2 Phenol 1 to 5 % 67-64-1 Acetone 5 to 10 % 64-17-5 Ethanol 10 to 20 %

SARA Section 302

50-00-0 71-36-3 108-95-2 67-64-1

SARA 311/312

50-00-0 Chronic Health Hazard, Acute Health Hazard
71-36-3 Fire Hazard, Chronic Health Hazard, Acute Health Hazard
1333-86-4 Chronic Health Hazard
108-95-2 Chronic Health Hazard, Acute Health Hazard
67-64-1 Fire Hazard, Chronic Health Hazard, Acute Health Hazard
1330-78-5 Chronic Health Hazard, Acute Health Hazard
64-17-5 Fire Hazard, Chronic Health Hazard, Acute Health Hazard

TSCA (Toxic Substance Control Act)

50-00-0 Formaldehyde 0.1 to 1.0 %
71-36-3 Butanol 1 to 5 %
108-95-2 Phenol 1 to 5 %
67-64-1 Acetone 5 to 10 %
8021-99-6 Black Pigment 5 to 10 %
1330-78-5 Phosphate Plasticizer 10 to 20 %

TSCA (Toxic Substance Control Act) 8b

50-00-0 Formaldehyde 0.1 to 1.0 %
71-36-3 Butanol 1 to 5 %
1333-86-4 Carbon Black 1 to 5 %
108-95-2 Phenol 1 to 5 %
67-64-1 Acetone 5 to 10 %
8021-99-6 Black Pigment 5 to 10 %
1330-78-5 Phosphate Plasticizer 10 to 20 %
64-17-5 Ethanol 10 to 20 %
9003-35-4 Phenolic resin 20 to 30 %

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Country	Regulation	All Components Listed
USA	New Jersey Right to Know	No
USA	Pennsylvania Right to Know	No
USA	Massachusetts Right to Know	No
AU	Australia inventory	No
CA	Canadian Domestic Substances List/Non-Domestic Substa	No
EU	European inventory	No
JP	Japan inventory	No
CN	China inventory	No
Korea	Korean Existing and Evaluated Chemical Substances	No
NZ	New Zealand inventory	No
PH	Philippine The Toxic Substances and Hazardous and Nucle	No
Canada		No

EU Risk Phrases

Safety Phrase

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations part 372.

108-95-2 Phenol 1.0 - 5% 50-00-0 Formaldehyde 0.1 - 1.0%

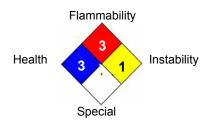
SECTION 16: OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH * 3 FLAMMABILITY 3 PHYSICAL HAZARD 1 PERSONAL PROTECTION B HMIS & N Legend * = Chroi 0 = INSIG 1 = SLIGH 2 = MODE 3 = HIGH

HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE

National Fire Protection Association (NFPA)



DISCLAIMER: The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

Date revised: 2016-10-06

Date Prepared: 10/6/2016

Reviewer Revision 2

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