Safety Data Sheet

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

Product Name: Brown Baked Phenolic Coating Product Code: P-403LC

MANUFACTURER : Heresite Protective 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:

Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Dermal Toxicity	Acute Tox. 4	Dermal>1000+<=2000mg/kg
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1 hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
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	1B	Presumed, Based on experimental animals

Signal Word: Danger

GHS Hazards

H302	Harmful if swallowed
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340	May cause genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash hands thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory protection
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)
P330	Rinse mouth
P363	Wash contaminated clothing before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
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.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
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
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P342+P311	Call a POISON CENTER or doctor/physician
P405	Store locked up
P501	Dispose of contents/container to in accordance with local/regional/national/international regulations.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight Concentration %
Phenolic resin	9003-35-4	20.00% - 30.00%
Acetone	67-64-1	10.00% - 20.00%
Kaolin	1332-58-7	10.00% - 20.00%
Yellow Iron Oxide	51274-00-1	10.00% - 20.00%
Phenol	108-95-2	5.00% - 10.00%
PM Acetate	108-65-6	5.00% - 10.00%
Butanol	71-36-3	5.00% - 10.00%
Water	7732-18-5	1.00% - 5.00%
Formaldehyde	50-00-0	1.00% - 5.00%
Ethylene Glycol Monobutyl Ether	111-76-2	1.00% - 5.00%
Crystalline Silica	14808-60-7	0.10% - 1.00%

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).

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
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
Kaolin 1332-58-7	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Yellow Iron Oxide 51274-00-1	STEL 10ppm	TLV 5mg/m3	Not Established
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)
PM Acetate 108-65-6	Not Established	Not Established	USA WEEL 50ppm TWA
Butanol 71-36-3	100 ppm TWA; 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling
Water 7732-18-5	Not Established	Not Established	Not Established
Formaldehyde 50-00-0	0.75 ppm TWA	0.3 ppm Ceiling	NIOSH: 0.016 ppm TWA 0.1 ppm Ceiling (15 min)

Ethylene Glycol Monobutyl Ether 111-76-2	50 ppm TWA; 240 mg/m3 TWA	20 ppm TWA	NIOSH: 5 ppm TWA; 24 mg/m3 TWA
Crystalline Silica 14808-60-7	TWA 10 mg/m3 PEL TWA 8hr	0.025 mg/m3 TWA (respirable fraction)	NIOSH: 0.05 mg/m3 TWA (respirable dust)

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:	88.4 mmHg	**Odor threshold:**	No Data Found
Vapor Density:	2.0	**pH:**	No Data Found
Specific Gravity	1.23	**Melting point:**	No Data Found
Freezing point:	No Data Found	**Solubility:**	No Data Found
Boiling range:	No Data Found	**Flash point:**	No Data Found
Evaporation rate:	No Data Found	**Flammability:**	No Data Found
Explosive Limits:	No Data Found	**Partition coefficient (n-octanol/water):**	No Data Found
Autoignition temperature:	No Data Found	**Decomposition temperature:**	No Data Found
Viscosity:	No Data Found	**Lbs VOC/Gallon Less Water**	2.94

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: 1,609mg/kg
Dermal Toxicity LD50: 2,586mg/kg
Inhalation Toxicity LC50: 20mg/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)
108-65-6	PM Acetate Dermal LD50: 5,000 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)

111-76-2 Ethylene Glycol Monobutyl Ether
Oral LD50: 470 mg/kg (Rat) Dermal LD50: 99 mg/kg (Rabbit) Inhalation LC50: 220 mg/kg (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:

Inhalation Skin Contact Eye Contact Ingestion

Exposure to this material may affect the following organs:

Blood Eyes Kidneys Liver Lungs Central Nervous System Skin Respiratory System Auditory System

Effects of Overexposure

pneumoconiosis	Lungs not found pneumoconiosis
	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
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

CAS Number	Description	% Weight	Carcinogen Rating
14808-60-7	Crystalline Silica	.1 to 1.0%	Crystalline Silica: NIOSH: potential occupational carcinogen IARC: Human carcinogen OSHA: listed
50-00-0	Formaldehyde	1 to 5%	Formaldehyde: NIOSH: potential occupational carcinogen 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

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
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 [flow-through]; 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]
PM Acetate	96 Hr LC50 Pimephales promelas: 161 mg/L [static] 48 Hr EC50 Daphnia magna: >500 mg/L
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]

Ethylene Glycol Monobutyl Ether	96 Hr LC50 Lepomis macrochirus: 1490 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 2950 mg/L 48 Hr EC50 Daphnia magna: >1000 mg/L

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.

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:

14808-60-7 Crystalline Silica 0.1 to 1.0 %
50-00-0 Formaldehyde 1 to 5 %

Clean Air Act

111-76-2 Ethylene Glycol Monobutyl Ether 1 to 5 %
50-00-0 Formaldehyde 1 to 5 %
7732-18-5 Water 1 to 5 %
71-36-3 Butanol 5 to 10 %
108-65-6 PM Acetate 5 to 10 %
108-95-2 Phenol 5 to 10 %
67-64-1 Acetone 10 to 20 %

SARA Section 302

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

SARA 311/312

14808-60-7
111-76-2 Fire Hazard, Chronic Health Hazard, Acute Health Hazard
50-00-0 Chronic Health Hazard, Acute Health Hazard

71-36-3 Fire Hazard, Chronic Health Hazard, Acute Health Hazard
108-65-6 Fire Hazard, Chronic Health Hazard
108-95-2 Chronic Health Hazard, Acute Health Hazard
51274-00-1 Delayed health hazard
67-64-1 Fire Hazard, Chronic Health Hazard, Acute Health Hazard

TSCA (Toxic Substance Control Act)

111-76-2 Ethylene Glycol Monobutyl Ether 1 to 5 %
50-00-0 Formaldehyde 1 to 5 %
7732-18-5 Water 1 to 5 %
71-36-3 Butanol 5 to 10 %
108-65-6 PM Acetate 5 to 10 %
108-95-2 Phenol 5 to 10 %
67-64-1 Acetone 10 to 20 %

TSCA (Toxic Substance Control Act) 8b

14808-60-7 Crystalline Silica 0.1 to 1.0 %
111-76-2 Ethylene Glycol Monobutyl Ether 1 to 5 %
50-00-0 Formaldehyde 1 to 5 %
7732-18-5 Water 1 to 5 %
71-36-3 Butanol 5 to 10 %
108-65-6 PM Acetate 5 to 10 %
108-95-2 Phenol 5 to 10 %
51274-00-1 Yellow Iron Oxide 10 to 20 %
1332-58-7 Kaolin 10 to 20 %
67-64-1 Acetone 10 to 20 %
9003-35-4 Phenolic resin 20 to 30 %

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.

14808-60-7 Crystalline Silica 0.1 - 1.0%
1332-58-7 Kaolin 10 - 20%
108-95-2 Phenol 5 - 10%
50-00-0 Formaldehyde 1.0 - 5%

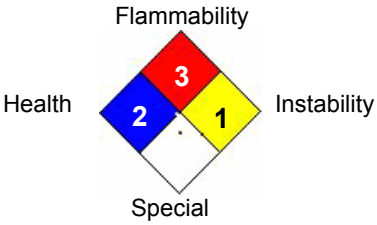
SECTION 16: OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	*	2
FLAMMABILITY		3
PHYSICAL HAZARD		1
PERSONAL PROTECTION		E

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

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

Reviewer Revision 2

Date Prepared: 10/6/2016