

Safety Data Sheet

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

Product Name: Clear Polyurethane Product Code: UC-5500 Part A

MANUFACTURER : Heresite Protective Coatings, LLC
822 S. 14th Street
Manitowoc, WI 54220

TELEPHONE NUMBER: 1 (920) 684-6646

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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	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
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

Signal Word: Danger



GHS Hazards

H226	Flammable liquid and vapour
H340	May cause genetic defects
H350	May cause cancer

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
P233	Keep container tightly closed
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
P281	Use personal protective equipment as required
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing . Rinse skin with water/ shower.
P308+P313	If exposed or concerned: Get medical advice/attention
P370+P378	In case of fire: Use CO2, dry chemical, or foam for extinction.

P403 Store in a well ventilated place
P405 Store locked up
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 %
Butyl Acetate	123-86-4	10.00% - 20.00%
Silica	7631-86-9	5.00% - 10.00%
Crystalline Silica	14808-60-7	1.00% - 5.00%
Methyl Amyl Ketone	110-43-0	1.00% - 5.00%
Solvent, Naphtha, Heavy Aromatic	64742-95-6	1.00% - 5.00%
Naphtha (petroleum) hydrotreated heavy	64742-48-9	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 damming-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
Butyl Acetate 123-86-4	150 ppm TWA; 710 mg/m3 TWA	200 ppm STEL 150 ppm TWA	NIOSH: 150 ppm TWA; 710 mg/m3 TWA 200 ppm STEL; 950 mg/m3 STEL

Silica 7631-86-9	Table Z-3 Mineral Dusts 20 million particles per cubic foot	Not Established	NIOSH: 6 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)
Methyl Amyl Ketone 110-43-0	100 ppm TWA; 465 mg/m3 TWA	50 ppm TWA	NIOSH: 100 ppm TWA; 465 mg/m3 TWA
Solvent, Naphtha, Heavy Aromatic 64742-95-6	Not Established	Not Established	Not Established
Naphtha (petroleum) hydrotreated heavy 64742-48-9	Not Established	Not Established	Not Established

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 penetration 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:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<p>Appearance: No Data Found</p> <p>Vapor Pressure: No Data Found</p> <p>Vapor Density: No Data Found</p> <p>Specific Gravity 1.17</p> <p>Freezing point: No Data Found</p> <p>Boiling point: >= 118C</p> <p>Evaporation rate: No Data Found</p> <p>Explosive Limits: No Data Found</p> <p>Autoignition temperature: No Data Found</p> <p>Viscosity: No Data Found</p>	<p>Odor: No Data Found</p> <p>Odor threshold: No Data Found</p> <p>pH: No Data Found</p> <p>Melting point: No Data Found</p> <p>Solubility: No Data Found</p> <p>Flash point: 31C, 88F</p> <p>Flammability: No Data Found</p> <p>Partition coefficient (n- octanol/water): No Data Found</p> <p>Decomposition temperature: No Data Found</p> <p>Grams VOC less water 2.8 (lbs/gal):</p>
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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: 2,251mg/kg

Dermal Toxicity LD50: 84mg/kg

Component Toxicity

123-86-4	Butyl Acetate Dermal LD50: 500 mg/m3 (Rabbit) Inhalation LC50: 390 ppm (Rat)
7631-86-9	Silica Oral LD50: 5,000 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit)
110-43-0	Methyl Amyl Ketone Oral LD50: 1,600 mg/kg (Rat) Dermal LD50: 13 mL/kg (Rabbit)

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

Exposure to this material may affect the following organs:

Eyes Lungs Central Nervous System Skin Peripheral Nervous System
Respiratory System

Effects of Overexposure

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

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

Irritating to eyes. Irritating to eyes.

May be harmful if swallowed May be harmful if swallowed

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
64742-48-9	Naphtha (petroleum) hydrotreated heavy	.1 to 1.0%	Naphtha (petroleum) hydrotreated heavy: EU REACH: Present (P)
14808-60-7	Crystalline Silica	1 to 5%	Crystalline Silica: 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

Butyl Acetate	96 Hr LC50 Lepomis macrochirus: 100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 17 - 19 mg/L [flow-through] 72 Hr EC50 Desmodesmus subspicatus: 674.7 mg/L
Silica	96 Hr LC50 Brachydanio rerio: 5000 mg/L [static] 48 Hr EC50 Ceriodaphnia dubia: 7600 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 440 mg/L
Methyl Amyl Ketone	96 Hr LC50 Pimephales promelas: 126 - 137 mg/L [flow-through]
Naphtha (petroleum) hydrotreated heavy	96 Hr LC50 Pimephales promelas: 2200 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.

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
IATA	Paint	1263	III	3
IMDG	Paint	1263	III	3
USDOT	Paint	1263	III	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 1 to 5 %

Clean Air Act

110-43-0 Methyl Amyl Ketone 1 to 5 %

123-86-4 Butyl Acetate 10 to 20 %

SARA Section 302

123-86-4

SARA 311/312

- 64742-48-9 Fire Hazard
- 64742-95-6 Fire Hazard, Chronic Health Hazard, Acute Health Hazard
- 110-43-0 Fire Hazard, Chronic Health Hazard, Acute Health Hazard
- 14808-60-7
- 7631-86-9 Chronic Health Hazard, Acute Health Hazard
- 123-86-4 Fire Hazard, Chronic Health Hazard, Acute Health Hazard

TSCA (Toxic Substance Control Act)

- 64742-48-9 Naphtha (petroleum) hydrotreated heavy 0.1 to 1.0 %
- 64742-95-6 Solvent, Naphtha, Heavy Aromatic 1 to 5 %
- 123-86-4 Butyl Acetate 10 to 20 %

TSCA (Toxic Substance Control Act) 8b

- 64742-48-9 Naphtha (petroleum) hydrotreated heavy 0.1 to 1.0 %
- 64742-95-6 Solvent, Naphtha, Heavy Aromatic 1 to 5 %
- 14808-60-7 Crystalline Silica 1 to 5 %
- 110-43-0 Methyl Amyl Ketone 1 to 5 %
- 7631-86-9 Silica 5 to 10 %
- 123-86-4 Butyl Acetate 10 to 20 %

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

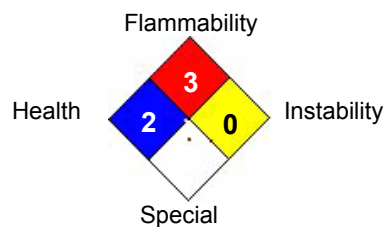
14808-60-7 Crystalline Silica 1.0 - 5%

SECTION 16: OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	*	2	HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH
FLAMMABILITY		3	
PHYSICAL HAZARD		0	
PERSONAL PROTECTION			

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.

Reviewer Revision

Date Prepared: 5/9/2016