

Safety Data Sheet

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

Product Name: Cure for CSE-7200 Series Cold Set Epoxy Product Code: CSE-7200 Series Part B

MANUFACTURER : Heresite Protective Coatings, LLC
822 S. 14th Street
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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)
Oral Toxicity	4	Oral $>300 + \leq 2000\text{mg/kg}$
Dermal Toxicity	4	Dermal $>1000 + \leq 2000\text{mg/kg}$
Inhalation Toxicity	4	Gases $>2500 + \leq 20000\text{ppm}$, Vapors $>10 + \leq 20\text{mg/l}$, Dusts&mists $>1 + \leq 5\text{mg/l}$
Skin corrosive	1B	Destruction of dermal tissue: Exposure < 1 hour Observation < 14 days, 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
Mutagen	1B	Known to produce heritable mutations in human germ cells Subcategory 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	2	Limited evidence of human or animal carcinogenicity
Reproductive toxin	2	Human or animal evidence possibly with other information
Organ toxin repeated exposure	2	Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases

Signal Word: Danger



GHS Hazards

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled

H340 May cause genetic defects
H351 Suspected of causing cancer
H361 Suspected of damaging fertility or the unborn child
H373 May cause damage to organs through prolonged or repeated exposure

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
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
P271 Use only outdoors or in a well-ventilated area
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
P330 Rinse mouth
P331 Do NOT induce vomiting
P363 Wash contaminated clothing before reuse
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
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
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
lenses, if present and easy to do. Continue rinsing.
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 %
Barium Sulfate	7727-43-7	20.00% - 30.00%
Magnesium Silicate Hydrate	14807-96-6	20.00% - 30.00%
Xylenes	1330-20-7	10.00% - 20.00%
Nonylphenol	25154-52-3	10.00% - 20.00%
Ethyl Benzene	100-41-4	1.00% - 5.00%
Diisodecyl Phthalate	68515-49-1	1.00% - 5.00%
Furfuryl Alcohol	98-00-0	1.00% - 5.00%
Mineral Spirits	8052-41-3	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
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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
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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
Barium Sulfate 7727-43-7	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	5 mg/m ³ TWA (inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica)	NIOSH: 10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)
Magnesium Silicate Hydrate 14807-96-6	TWA 20ppm Table Z-3 TWA 2mg/m ³ Table Z-1	2 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	NIOSH: 2 mg/m ³ TWA (containing no Asbestos and <1% Quartz, respirable dust)
Xylenes 1330-20-7	100 ppm TWA; 435 mg/m ³ TWA	150 ppm STEL 100 ppm TWA	Not Established
Nonylphenol 25154-52-3	Not Established	Not Established	Not Established
Ethyl Benzene 100-41-4	100 ppm TWA; 435 mg/m ³ TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m ³ TWA 125 ppm STEL; 545 mg/m ³ STEL
Diisodecyl Phthalate 68515-49-1	Not Established	Not Established	Not Established
Furfuryl Alcohol 98-00-0	50 ppm TWA; 200 mg/m ³ TWA	15 ppm STEL 10 ppm TWA	NIOSH: 10 ppm TWA; 40 mg/m ³ TWA 15 ppm STEL; 60 mg/m ³ STEL
Mineral Spirits 8052-41-3	500 ppm TWA; 2900 mg/m ³ TWA	100 ppm TWA	NIOSH: 350 mg/m ³ TWA 1800 mg/m ³ 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 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:

See Section 6.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<p>Appearance: No Data Found</p> <p>Vapor Pressure: 17.6 mmHg</p> <p>Vapor Density: 3.7</p> <p>Specific Gravity 1.36</p> <p>Freezing point: No Data Found</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>Solubility: 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>Flash point: 27C</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: No Data Found</p> <p>Boiling range: >=136C</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.

Heat/sparks/open flames/hot surfaces.

Strong Oxidizers

Aluminum

Phosphorous

Hazardous decomposition products:

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

SECTION 11: TOXICOLOGICAL INFORMATION

Mixture Toxicity

Oral Toxicity LD50: 2,049mg/kg
Inhalation Toxicity LC50: 167mg/L

Component Toxicity

1330-20-7	Xylenes Oral LD50: 3,500 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (rabbit) Inhalation LC50: 29 mg/L (Rat)
25154-52-3	Nonylphenol Oral LD50: 580 mg/kg (Rat) Dermal LD50: 2,031 mg/kg (Rabbit)
100-41-4	Ethyl Benzene Oral LD50: 3,500 mg/kg (Rat) Inhalation LC50: 17 mg/L (Rat)
98-00-0	Furfuryl Alcohol Oral LD50: 110 mg/kg (Rat) Dermal LD50: 657 mg/kg (Rabbit) Inhalation LC50: 233 ppm (Rat)
8052-41-3	Mineral Spirits Oral LD50: 5 g/kg (Rat) Dermal LD50: 5 g/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 System Eyes Kidneys Lungs Central Nervous System Skin Cardiovascular System Respiratory System

Effects of Overexposure

Repeated exposure may cause skin dryness or cracking
Chronic overexposure can cause harm to blood and central nervous system. Limits for Air Contaminants

CAS Number	Description	% Weight	Carcinogen Rating
100-41-4	Ethyl Benzene	1 to 5%	Ethyl Benzene: IARC: Possible human carcinogen OSHA: listed
8052-41-3	Mineral Spirits	0.1 to 1.0%	Mineral Spirits: EU REACH: Present (P)

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

Barium Sulfate	No data available.
Magnesium Silicate Hydrate	96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]
Xylenes	96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static] 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L
Nonylphenol	96 Hr LC50 Pimephales promelas: 0.135 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 0.14 mg/L; 48 Hr EC50 Daphnia magna: 0.17 - 0.21 mg/L [Static]; 48 Hr EC50 Daphnia magna: 0.0874 - 0.124 mg/L [semi-static] 96 Hr EC50 Pseudokirchneriella subcapitata: 0.41 mg/L; 72 Hr EC50 Desmodemus subspicatus: 1.3 mg/L
Ethyl Benzene	96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]
Diisodecyl Phthalate	96 Hr LC50 Pimephales promelas: >0.66 mg/L [static]; 96 Hr LC50 Pimephales promelas: >1 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: >1 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: >0.62 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: >0.55 mg/L [static] 48 Hr EC50 Daphnia magna: >0.18 mg/L 96 Hr EC50 Pseudokirchneriella subcapitata: >1.3 mg/L
Furfuryl Alcohol	96 Hr LC50 Pimephales promelas: 32 mg/L [static]
Mineral Spirits	Not toxic at limit of solubility LC/EC/IC50 > 1000mg/L Freshwater Fish, Invertebrates and Algae

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:

100-41-4 Ethyl Benzene 1 to 5 %

68515-49-1 Diisodecyl Phthalate 1 to 5 %

Clean Air Act

100-41-4 Ethyl Benzene 1 to 5 %

25154-52-3 Nonylphenol 10 to 20 %

1330-20-7 Xylenes 10 to 20 %

Clean Water Act

100-41-4 Ethyl Benzene 1 to 5 %

1330-20-7 Xylenes 10 to 20 %

SARA Section 302

100-41-4

1330-20-7

OSHA Hazards

100-41-4 Ethyl Benzene 1 to 5 % Carcinogen, Flammable liquid

1330-20-7 Xylenes 10 to 20 % Carcinogen, Flammable liquid, Target Organ Effect, Harmful /skin absorption, Irritant

14807-96-6 Magnesium Silicate Hydrate 20 to 30 % Carcinogen, Target Organ Effect, Toxic by inhalation

7727-43-7 Barium Sulfate 20 to 30 % Target Organ Effect

- None

SARA 311/312

100-41-4 Fire Hazard, Chronic Health Hazard

1330-20-7 Fire Hazard, Chronic Health Hazard, Acute Health Hazard

14807-96-6 Chronic Health Hazard, Acute Health Hazard

7727-43-7 Chronic Health Hazard

SARA 313

100-41-4 Ethyl Benzene 1 to 5 %

25154-52-3 Nonylphenol 10 to 20 %

1330-20-7 Xylenes 10 to 20 %

TSCA (Toxic Substance Control Act)

8052-41-3 Mineral Spirits 0.1 to 1.0 %

68515-49-1 Diisodecyl Phthalate 1 to 5 %

100-41-4 Ethyl Benzene 1 to 5 %

25154-52-3 Nonylphenol 10 to 20 %

TSCA (Toxic Substance Control Act) 8b

8052-41-3 Mineral Spirits 0.1 to 1.0 %

68515-49-1 Diisodecyl Phthalate 1 to 5 %

100-41-4 Ethyl Benzene 1 to 5 %

98-00-0 Furfuryl Alcohol 1 to 5 %

25154-52-3 Nonylphenol 10 to 20 %

1330-20-7 Xylenes 10 to 20 %

14807-96-6 Magnesium Silicate Hydrate 20 to 30 %

7727-43-7 Barium Sulfate 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	Yes
CA	Canadian Domestic Substances List/Non-Domestic Substances List	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 Nuclear Waste Control Act	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.

SECTION 16: OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

HMIS & NFPA Hazard Rating

Legend

* = Chronic Health Hazard

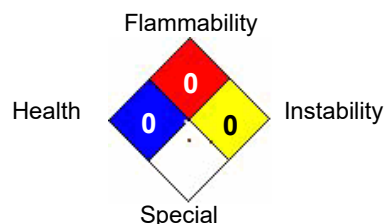
0 = INSIGNIFICANT

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: 2017-03-29

Reviewer Revision 2

Date Prepared: 5/5/2021