



Safety Data Sheet acc. to OSHA HCS

Printing date 03/12/2020

Reviewed on 03/12/2020

1 Identification

- **Product identifier**
- **Trade name:** EP210R RED EPOXY PRIMER
- **Article number:** EP210R
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Lusid Technologies
4725 S Camp Kearns Road
Kearns, UT 84118
USA
www.lusidtechnologies.com
- **Information department:** Product safety department
- **Emergency telephone number:**
24 Hrs Emergency Contact:
INFOTRAC
1-800-535-5053

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.
Carc. 1B H350 May cause cancer.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.Aquatic Acute 3 H402 Harmful to aquatic life.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

4-chloro-alpha,alpha,alpha-trifluorotoluene
Stoddard solvent

· **Hazard statements**

Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
May cause genetic defects.
May cause cancer.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 2
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *2
Fire = 2
Reactivity = 0

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- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	25-50%
68410-23-1	Liquid Polyamide Resin	25-50%
110-43-0	heptan-2-one	10-25%
7779-90-0	trizinc bis(orthophosphate)	≤2.5%
100-41-4	ethylbenzene	≤2.5%
8052-41-3	Stoddard solvent	≤2.5%

4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.

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Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

68410-23-1	Liquid Polyamide Resin	30 mg/m ³
110-43-0	heptan-2-one	150 ppm
1309-37-1	diiron trioxide	15 mg/m ³
7779-90-0	trizinc bis(orthophosphate)	12 mg/m ³
100-41-4	ethylbenzene	33 ppm
108-38-3	m-xylene	130 ppm
8052-41-3	Stoddard solvent	300 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	18 mg/m ³

· **PAC-2:**

68410-23-1	Liquid Polyamide Resin	330 mg/m ³
110-43-0	heptan-2-one	670 ppm
1309-37-1	diiron trioxide	360 mg/m ³
7779-90-0	trizinc bis(orthophosphate)	36 mg/m ³
100-41-4	ethylbenzene	1100* ppm
108-38-3	m-xylene	920 ppm
8052-41-3	Stoddard solvent	1,800 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	740 mg/m ³

· **PAC-3:**

68410-23-1	Liquid Polyamide Resin	2,000 mg/m ³
110-43-0	heptan-2-one	4000* ppm
1309-37-1	diiron trioxide	2,200 mg/m ³
7779-90-0	trizinc bis(orthophosphate)	220 mg/m ³
100-41-4	ethylbenzene	1800* ppm
108-38-3	m-xylene	2500* ppm
8052-41-3	Stoddard solvent	29500** mg/m ³
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m ³

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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Keep respiratory protective device available.

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

110-43-0 heptan-2-one

PEL	Long-term value: 465 mg/m ³ , 100 ppm
REL	Long-term value: 465 mg/m ³ , 100 ppm
TLV	Long-term value: 233 mg/m ³ , 50 ppm

100-41-4 ethylbenzene

PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Long-term value: 87 mg/m ³ , 20 ppm BEI

8052-41-3 Stoddard solvent

PEL	Long-term value: 2900 mg/m ³ , 500 ppm
REL	Long-term value: 350 mg/m ³ Ceiling limit value: 1800* mg/m ³ *15-min
TLV	Long-term value: 525 mg/m ³ , 100 ppm

- **Ingredients with biological limit values:**

100-41-4 ethylbenzene

BEI	0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)
-	Medium: end-exhaled air Time: not critical Parameter: Ethyl benzene (semi-quantitative)

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Liquid

Color:

Dark red

· **Odor:**

Characteristic

· **Odor threshold:**

Not determined.

· **pH-value:**

Not determined (pH N/A in solvent coatings)

· **Change in condition**

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

139 °C (282.2 °F)

· **Flash point:**

39 °C (102.2 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

393 °C (739.4 °F)

· **Decomposition temperature:**

Not determined.

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· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1 Vol %
Upper:	5.5 Vol %
· Vapor pressure at 20 °C (68 °F):	3.5 hPa (2.6 mm Hg)
· Density at 20 °C (68 °F):	1.2326 g/cm ³ (10.286 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	17.3 %
VOC content:	17.70 %
	218.2 g/l / 1.82 lb/gal
Solids content:	33.2 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

68410-23-1 Liquid Polyamide Resin

Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)

110-43-0 heptan-2-one

Oral	LD50	1,670 mg/kg (rat)
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Dermal LD50 12,600 mg/kg (rabbit)

7779-90-0 trizinc bis(orthophosphate)

Oral LD50 >5,000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

The product can cause inheritable damage.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	2B
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	3
1309-37-1	diiron trioxide	3
95-47-6	o-xylene	3
100-41-4	ethylbenzene	2B
106-42-3	p-xylene	3
108-38-3	m-xylene	3
7631-86-9	silicon dioxide, chemically prepared	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Harmful to fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|--|---|
| <ul style="list-style-type: none"> · UN-Number · DOT, IMDG, IATA | UN1263 |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · IMDG, IATA | Paint
PAINT |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | <div style="text-align: center;">  <p>3</p> </div> |
| <ul style="list-style-type: none"> · Class · Label | 3 Flammable liquids
3 |
| <ul style="list-style-type: none"> · IMDG, IATA | |
| <ul style="list-style-type: none"> · Class · Label | <div style="text-align: center;">  <p>3</p> </div> |
| <ul style="list-style-type: none"> · Class · Label | 3 Flammable liquids
3 |
| <ul style="list-style-type: none"> · Packing group · DOT, IMDG, IATA | III |
| <ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: | No |
| <ul style="list-style-type: none"> · Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category | Warning: Flammable liquids
30
F-E, S-E
A |
| <ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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- **Transport/Additional information:**

- **DOT**

- **Quantity limitations**

On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L

- **IMDG**

- **Limited quantities (LQ)**

5L

- **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

- **UN "Model Regulation":**

UN 1263 PAINT, 3, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

7779-90-0 trizinc bis(orthophosphate)

95-47-6 o-xylene

100-41-4 ethylbenzene

106-42-3 p-xylene

108-38-3 m-xylene

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **Hazardous Air Pollutants**

95-47-6 o-xylene

100-41-4 ethylbenzene

106-42-3 p-xylene

108-38-3 m-xylene

- **Proposition 65**

- **Chemicals known to cause cancer:**

98-56-6 4-chloro-alpha,alpha,alpha-trifluorotoluene

100-41-4 ethylbenzene

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

7779-90-0 trizinc bis(orthophosphate)

D, I, II

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95-47-6	<i>o</i> -xylene	I
100-41-4	ethylbenzene	D
106-42-3	<i>p</i> -xylene	I
108-38-3	<i>m</i> -xylene	I

· TLV (Threshold Limit Value established by ACGIH)

14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	A4
1309-37-1	diiron trioxide	A4
95-47-6	<i>o</i> -xylene	A4
100-41-4	ethylbenzene	A3
106-42-3	<i>p</i> -xylene	A4
108-38-3	<i>m</i> -xylene	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms


GHS02 GHS07 GHS08

· Signal word Danger
· Hazard-determining components of labeling:

4-chloro- α,α,α -trifluorotoluene
Stoddard solvent

· Hazard statements

Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
May cause genetic defects.
May cause cancer.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

· Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).

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Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection department.

· **Contact:** Product Safety Dept.

· **Date of preparation / last revision** 03/12/2020 / 3

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1B: Carcinogenicity – Category 1B

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**