



Printing date 04/08/2015 Reviewed on 04/08/2015

1 Identification

- · Product identifier
- · Trade name: GSEAL GSEAL SEALER
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: Lusid Technologies 5195 West 4700 South KEARNS, UT 84118 USA
- · Information department: Product safety department
- · Emergency telephone number: 1-800-535-5053

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child. Repr. 2

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



X Harmful

Harmful by inhalation.



Highly flammable

Highly flammable.



Dangerous for the environment

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of international guidelines.

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· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- · Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:







Harmful Highly flammable Dangerous for the environment

· Risk phrases:

Highly flammable.

Harmful by inhalation.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:

Keep out of the reach of children.

Keep container in a well-ventilated place.

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. If swallowed, seek medical advice immediately and show this container or label.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0

Fire = 3

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



*0 *Health* = *0

Fire = 3

REACTIVITY 0 Reactivity = 0

- · 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.

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|---------------|-----------------------------|--------------------|
| · Dangerous o | components: | |
| 13463-67-7 | titanium dioxide | 10-25% |
| 1330-20-7 | xylene | 2.5-10% |
| 78-93-3 | butanone | 2.5-10% |
| 110-43-0 | heptan-2-one | 2.5-10% |
| 108-88-3 | toluene | 2.5-10% |
| 7779-90-0 | trizinc bis(orthophosphate) | 2.5-10% |
| 14807-96-6 | Talc (Mg3H2(SiO3)4) | 2.5-10% |
| 100-41-4 | ethylbenzene | ≤ 2.5% |
| 1317-65-3 | Calcium carbonate | ≤ 2.5% |
| 1333-86-4 | Carbon black | ≤ 2.5% |

4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · 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, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

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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.

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.

Do not flush with water or aqueous cleansing agents

· 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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.

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(Contd. of page 4) · Control parameters · Components with limit values that require monitoring at the workplace: 1330-20-7 xylene PEL Long-term value: 435 mg/m³, 100 ppm REL Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm TLV Short-term value: 651 mg/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm BEI78-93-3 butanone PEL Long-term value: 590 mg/m³, 200 ppm REL Short-term value: 885 mg/m³, 300 ppm Long-term value: 590 mg/m³, 200 ppm TLV Short-term value: 885 mg/m³, 300 ppm Long-term value: 590 mg/m³, 200 ppm BEI110-43-0 heptan-2-one PEL Long-term value: 465 mg/m³, 100 ppm REL Long-term value: 465 mg/m³, 100 ppm TLV Long-term value: 233 mg/m³, 50 ppm 108-88-3 toluene PEL Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift REL Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm TLV Long-term value: 75 mg/m³, 20 ppm BEI100-41-4 ethylbenzene PEL Long-term value: 435 mg/m³, 100 ppm REL Short-term value: 545 mg/m³, 125 ppm Long-term value: 435 mg/m³, 100 ppm TLV Long-term value: 87 mg/m³, 20 ppm · Ingredients with biological limit values: 1330-20-7 xylene BEI 1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

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78-93-3 butanone

BEI 2 mg/L

Medium: urine Time: end of shift Parameter: MEK

108-88-3 toluene

BEI 0.02 mg/L

Medium: blood

Time: prior to last shift of workweek

Parameter: Toluene

0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene

0.3 mg/g creatinine Medium: urine Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

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

· 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:

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 (Contd. on page 7)

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· 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 basis physical and show |

| · Information on basic physical and chemical properties · General Information | | | | |
|--|--|--|--|--|
| · Appearance: | | | | |
| Form: | Liquid | | | |
| Color: | Grey | | | |
| · Odor: | Characteristic | | | |
| · Odour threshold: | Not determined. | | | |
| · pH-value: | Not determined. | | | |
| · Change in condition | | | | |
| Melting point/Melting range: | Undetermined. | | | |
| Boiling point/Boiling range: | 79 °C (174 °F) | | | |
| · Flash point: | -4 °C (25 °F) | | | |
| · Flammability (solid, gaseous): | Not applicable. | | | |
| · Ignition temperature: | 500 °C (932 °F) | | | |
| · Decomposition temperature: | Not determined. | | | |
| · 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: | Not determined. | | | |
| Upper: | Not determined. | | | |
| · Vapor pressure: | Not determined. | | | |
| · Density at 20 °C (68 °F): | 1.275 g/cm³ (10.64 lbs/gal) | | | |
| · Relative density | Not determined. | | | |

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|------------------------------------|--|-----------------|
| · Vapour density | Not determined. | |
| · Evaporation rate | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol | /water): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Organic solvents: | 34.7 % | |
| VOC content: | 34.2 % | |
| | Coating VOC 558.2 g/l / 4.65 lb/gl | |
| | Material VOC 524.6 g/l / 4.37 lb/gl | |
| Solids content: | 55.1 % | |
| · Other information | No further relevant information available. | |

10 Stability and reactivity

- · Reactivity
- · 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: | | | | | |
|--|------------------|----------------------|--|--|--|
| 1330-20-7 xylene | | | | | |
| Oral | LD50 | 4300 mg/kg (rat) | | | |
| Dermal | <i>LD50</i> | 2000 mg/kg (rabbit) | | | |
| 108-88-3 t | 108-88-3 toluene | | | | |
| Oral | LD50 | 5000 mg/kg (rat) | | | |
| Dermal | LD50 | 12124 mg/kg (rabbit) | | | |
| Inhalative | LC50/4 h | 5320 mg/l (mouse) | | | |

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7779-90-0 trizinc bis(orthophosphate) Oral LD50 >5000 mg/kg (rat)

- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

· Carcinogenic categories

| · IARC (Inter | national Agency for Research on Cancer) | |
|----------------|---|----|
| 13463-67-7 | titanium dioxide | 2B |
| 1330-20-7 | xylene | 3 |
| 108-88-3 | toluene | 3 |
| 14807-96-6 | Talc (Mg3H2(SiO3)4) | 2B |
| 100-41-4 | ethylbenzene | 2B |
| 1333-86-4 | Carbon black | 2B |
| 100-42-5 | styrene | 2B |
| 3.777D /3.7 /* | Im : I b | |

· NTP (National Toxicology Program)

100-42-5 styrene

R

· 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.
- · Ecotoxical effects:
- · Remark: Toxic for 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.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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

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- · vPvB: Not applicable.
- $\cdot \textit{Other adverse effects} \ \textit{No further relevant information available}.$

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.

14 Transport information

- · UN-Number
- · DOT, IMDG, IATA UN1263
- · UN proper shipping name
- · **DOT** Pair
- · IMDG PAINT (trizinc bis(orthophosphate)), MARINE POLLUTANT
- \cdot IATA PAINT
- · Transport hazard class(es)
- $\cdot DOT$



- · Class 3 Flammable liquids
- · Label
- \cdot IMDG



- · Class 3 Flammable liquids
- · Label
- \cdot IATA



· Class 3 Flammable liquids

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| | (Contd. of page |
|---|---|
| · Label | 3 |
| · Packing group | |
| · DOT, IMDG, IATA | II |
| · Environmental hazards: | Product contains environmentally hazardous substances: trizin |
| | bis(orthophosphate) |
| · Marine pollutant: | Yes |
| - | Symbol (fish and tree) |
| · Special precautions for user | Warning: Flammable liquids |
| · Danger code (Kemler): | 33 |
| EMS Number: | F-E, <u>S-E</u> |
| · Transport in bulk according to Annex | II of |
| MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| $\cdot DOT$ | |
| · Quantity limitations | On passenger aircraft/rail: 5 L |
| | On cargo aircraft only: 60 L |
| · IMDG | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E2 |
| • | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 500 ml |
| · UN "Model Regulation": | UN1263, Paint, ENVIRONMENTALLY HAZARDOUS, 3, II |

15 Regulatory information

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

| · Section 355 | (extremely | hazardous | sub | stances) | : |
|---------------|------------|-----------|-----|----------|---|
| | | | | | |

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

1330-20-7 xylene

78-93-3 butanone

108-88-3 toluene

7779-90-0 trizinc bis(orthophosphate)

100-41-4 ethylbenzene

100-42-5 styrene

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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(Contd. of page 11) · Proposition 65 · Chemicals known to cause cancer: 13463-67-7 titanium dioxide 100-41-4 ethylbenzene 1333-86-4 Carbon black · Chemicals known to cause reproductive toxicity for females: 108-88-3 toluene · Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. · Chemicals known to cause developmental toxicity: 108-88-3 toluene · Carcinogenic categories · EPA (Environmental Protection Agency) 1330-20-7 xylene 78-93-3 butanone 108-88-3 toluene II 7779-90-0 trizinc bis(orthophosphate) D, I, II 100-41-4 ethylbenzene D67-64-1 acetone · TLV (Threshold Limit Value established by ACGIH) 13463-67-7 titanium dioxide A41330-20-7 xylene A4108-88-3 toluene *A4* 14807-96-6 Talc (Mg3H2(SiO3)4) A4100-41-4 ethylbenzene *A3* A4 67-64-1 acetone 1333-86-4 Carbon black A4A4100-42-5 styrene · NIOSH-Ca (National Institute for Occupational Safety and Health) 13463-67-7 titanium dioxide 1333-86-4 Carbon black

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

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· Hazard symbols:







Harmful Highly flammable Dangerous for the environment

· Risk phrases:

Highly flammable.

Harmful by inhalation.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:

Keep out of the reach of children.

Keep container in a well-ventilated place.

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. If swallowed, seek medical advice immediately and show this container or label.

· 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: Mr. Roberts
- · Date of preparation / last revision 04/08/2015 / -
- · 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

Flam. Liq. 2: Flammable liquids, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

USA