Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
· Trade name: LEAK LOCK
· Article number: 10001, 10004, 10016, 10128, 10550

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Application of the substance / the preparation
Pipe joint sealant, Gasket seal, Threadlocker

1.4 Details of the supplier of the Safety Data Sheet
· Manufacturer/Supplier:
  Highside Chemicals, Inc.
  11114 Reichold Road
  Gulfport, MS 39503
  Phone: (228) 896-9220
· Further information obtainable from: Product Safety Department
· Emergency telephone number:
  ChemTel Inc.
  (800)255-3924, +1 (813)248-0585

2 Hazards identification

2.1 Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008
  GHS02 flame
  Flam. Liq. 2 H225: Highly flammable liquid and vapour.
  Classification according to Directive 67/548/EEC or Directive 1999/45/EC
  F: Highly flammable
  R11: Highly flammable.
· Information concerning particular hazards for human and environment:
  The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
· Classification system:
  The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
  The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.
· Label elements
  · Labelling according to Regulation (EC) No 1272/2008
    The product is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS02

Signal word Danger

Hazard-determining components of labelling: titanium dioxide

Hazard statements
H225 Highly flammable liquid and vapour.

Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.
P280 Ground/bond container and receiving equipment.
P293 Keep container tightly closed.
P292 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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 for extinction: CO2, powder or water spray.
P405 Store locked up.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/ regional/national/international regulations.

Hazard description:

WHMIS-symbols:
B2 - Flammable liquid
D2B - Toxic material causing other toxic effects

NFPA ratings (scale 0 - 4)
Health = 2
Fire = 3
Reactivity = 0
Trade name: LEAK LOCK

- **HMIS-ratings (scale 0 - 4)**

  - **HEALTH**
    - Health = *2
  - **FIRE**
    - Fire = 3
  - **REACTIVITY**
    - Reactivity = 0

  * - Indicates a long term health hazard from repeated or prolonged exposures.

- **HMIS Long Term Health Hazard Substances**
  - 64-17-5 ethanol
  - 13463-67-7 titanium dioxide

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

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### 3 Composition/information on ingredients

- **3.2 Mixtures**
  - **Description**: Mixture of substances listed below with nonhazardous additions.

- **Dangerous components**:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Index number</th>
<th>Substance and hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>200-578-6</td>
<td>603-002-00-5</td>
<td>ethanol, Flamm. &quot;F&quot;, R11, Flam.&quot;Liq. 2&quot;, H225, 25-50%</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>236-675-5</td>
<td></td>
<td>titanium dioxide, Xn R20-40, Carc. Cat. 3, Carc. 2, H351, Acute Tox. 4, H332, &lt; 10%</td>
</tr>
<tr>
<td>57-55-6</td>
<td>200-338-0</td>
<td></td>
<td>Propylene Glycol, substance with a Community workplace exposure limit, &lt; 10%</td>
</tr>
</tbody>
</table>

- **Additional information**: For the wording of the listed risk phrases refer to section 16.

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### 4 First aid measures

- **4.1 Description of first aid measures**
  - **General information**: No special measures required.
  - **After inhalation**: Supply fresh air; consult doctor in case of complaints.
  - **After skin contact**:
    - Clean with water and soap.
    - If skin irritation continues, consult a doctor.
  - **After eye contact**:
    - Rinse opened eye for several minutes under running water.
    - Remove contact lenses if worn.
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

(Contd. on page 4)
After swallowing:
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed
Dizziness
Gastric or intestinal disorders

Hazard: No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
If swallowed, gastric irrigation with added, activated carbon.
Medical supervision for at least 48 hours.

5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture
In case of fire, the following can be released:
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters
Protective equipment:
Wear self-contained respiratory protective device.
Wear fully protective suit.

Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
Protect from heat.

6.2 Environmental precautions: Dilute with plenty of water.

6.3 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.

6.4 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

- 7.1 Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- Information about fire - and explosion protection:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
  Flammable gas-air mixtures may form in empty receptacles.

- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  Requirements to be met by storerooms and receptacles:
  Store in a cool location.
  Provide ventilation for receptacles.
- Information about storage in one common storage facility:
  Store away from foodstuffs.
  Store away from oxidizing agents.
- Further information about storage conditions:
  Store in cool, dry conditions in well sealed receptacles.
  Keep container tightly sealed.
  Store receptacle in a well ventilated area.
- 7.3 Specific end use(s)
  No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters

| Ingredients with limit values that require monitoring at the workplace: |
|-----------------------------|----------------|
| 64-17-5 ethanol             |                |
| PEL (USA)                   | 1900 mg/m³, 1000 ppm |
| REL (USA)                   | 1900 mg/m³, 1000 ppm |
| TLV (USA)                   | Short-term value: 1880 mg/m³, 1000 ppm |
| EL (Canada)                 | Short-term value: 1000 ppm |
| EV (Canada)                 | 1,900 mg/m³, 1,000 ppm |

| 57-55-6 Propylene Glycol    |                |
| WEEL (USA)                  | 10 mg/m³        |
| EV (Canada)                 | 155* 10** mg/m³, 50* ppm |
|                            | *vapour and aerosol;**aerosol only |

- DNELs
  No further relevant information available.
- PNECs
  No further relevant information available.
- Additional information: The lists valid during the making were used as basis.
· **8.2 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.
  Avoid contact with the eyes and skin.
  Do not inhale dust / smoke / mist.

- **Respiratory protection:**
  Use suitable respiratory protective device in case of insufficient ventilation.
  Use suitable respiratory protective device when aerosol or mist is formed.

- **Protection of hands:**

  ![Glove](glove.png)

  **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**
  Sensibilization by the components in the glove materials is possible.
  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.

- **For the permanent contact gloves made of the following materials are suitable:**
  Butyl rubber, BR
  Nitrile rubber, NBR
  Neoprene gloves

- **Eye protection:**
  Contact lenses should not be worn.

  ![Safety Glasses](safety_glasses.png)

  **Safety glasses with side shields or face shield strongly suggested.**

- **Body protection:** Protective work clothing

- **Limitation and supervision of exposure into the environment** No special requirements.

- **Risk management measures**
  See Section 7 for additional information.
  No special requirements.
## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- **General Information**
  - **Appearance:**
    - **Form:** Pourable paste
    - **Colour:** Blue or Gray
    - **Odour:** Alcohol-like
    - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** 172 °F / 78 °C

- **Flash point:** 61 °F / 16 °C

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 797 °F / 425 °C

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not self-igniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**
  - **Lower:** 3,5 Vol %
  - **Upper:** 15,0 Vol %

- **Vapour pressure at 20 °C:** 59 hPa

- **Density at 20 °C:** 1,3 g/cm³

- **Relative density:** Not determined.

- **Vapour 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.

### 9.2 Other information

No further relevant information available.
10 Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions
Flammable.
Reacts with oxidizing agents.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
Used empty containers may contain product gases which form explosive mixtures with air.
Reacts with peroxides and other radical forming substances.
10.4 Conditions to avoid
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products:
Toxic metal oxide smoke
Hydrocarbons
Carbon monoxide and carbon dioxide

11 Toxicological information

11.1 Information on toxicological effects
Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7 titanium dioxide</td>
</tr>
<tr>
<td>Oral LD50 &gt;20000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50 &gt;10000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h &gt;6,82 mg/l (rat)</td>
</tr>
<tr>
<td>57-55-6 Propylene Glycol</td>
</tr>
<tr>
<td>Oral LD50 20000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50 20800 mg/kg (rabbit)</td>
</tr>
<tr>
<td>64-17-5 ethanol</td>
</tr>
<tr>
<td>Oral LD50 7060 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h 20000 mg/l (rat)</td>
</tr>
</tbody>
</table>

Primary irritant effect:
on the skin: Slight irritant effect on skin and mucous membranes.
on the eye: Irritating effect.
Sensitization: Sensitizing effect by skin contact is possible by prolonged exposure.
Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

- **Repeated dose toxicity** Repeated exposures may result in skin and/or respiratory sensitivity.

### 12 Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity**: The product contains materials that are harmful to the environment.
  - **12.2 Persistence and degradability** The product is partly biodegradable. Significant residuals remain.
  - **12.3 Bioaccumulative potential** May be accumulated in organism
  - **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**
  - **General notes:** This statement was deduced from the properties of the single components. Avoid transfer into the environment.
  - Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
  - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

- **12.6 Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**
    - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
    - Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
    - Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

- **Uncleaned packaging:**
  - **Recommendation**: Disposal must be made according to official regulations.
  - **Recommended cleansing agents**: Water, if necessary together with cleansing agents.

### 14 Transport information

- **14.1 UN-Number**
  - DOT, ADR, IMDG, IATA: UN1133
### 14.2 UN proper shipping name
- DOT, ADR, IMDG, IATA  
  - Adhesives

### 14.3 Transport hazard class(es)
- DOT
  - Class 3 Flammable liquids.
  - Label 3
- ADR
  - Class 3 (F1) Flammable liquids.
  - Label 3
- IMDG, IATA
  - Class 3 Flammable liquids.
  - Label 3

### 14.4 Packing group
- DOT, ADR, IMDG, IATA  
  - II

### 14.5 Environmental hazards:
- Marine pollutant: No

### 14.6 Special precautions for user
- Warning: Flammable liquids.
- Danger code (Kemler): 33
- EMS Number: F-E,S-D

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

### Transport/Additional information:
- ADR
  - Limited quantities (LQ) 5L
  - Transport category 2
  - Tunnel restriction code D/E
- UN "Model Regulation": UN1133, ADHESIVES, 3, II
15 Regulatory information

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

- **United States (USA)**

  - **SARA**
    - **Section 355 (extremely hazardous substances):**
      None of the ingredients is listed.
    - **Section 313 (Specific toxic chemical listings):**
      None of the ingredients is listed.

  - **TSCA (Toxic Substances Control Act):**
    All ingredients are listed.

  - **Proposition 65 (California):**
    - **Chemicals known to cause cancer:**
      Reference to Titanium Dioxide is based on unbound respirable particles and is not generally applicable to product as supplied.
      - 13463-67-7 titanium dioxide
    - **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:**
      Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.
      - 64-17-5 ethanol

  - **Carcinogenic Categories**
    - **EPA (Environmental Protection Agency)**
      None of the ingredients is listed.
    - **IARC (International Agency for Research on Cancer)**
      13463-67-7 titanium dioxide
    - **TLV (Threshold Limit Value established by ACGIH)**
      13463-67-7 titanium dioxide A4
      64-17-5 ethanol A3
    - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
      13463-67-7 titanium dioxide
    - **OSHA-Ca (Occupational Safety & Health Administration)**
      None of the ingredients is listed.

- **Canada**

  - **Canadian Domestic Substances List (DSL)**
    All ingredients are listed.
Trade name: LEAK LOCK

15.2 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.

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
  - H332 Harmful if inhaled.
  - H351 Suspected of causing cancer.
  - R11 Highly flammable.
  - R20 Harmful by inhalation.
  - R40 Limited evidence of a carcinogenic effect.

- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - WHMIS: Workplace Hazardous Materials Information System (Canada)
  - DNEL: Derived No-Effect Level (REACH)
  - PNEC: Predicted No-Effect Concentration (REACH)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent

- **Sources**
  - SDS Prepared by:
    - ChemTel Inc.
    - 1305 North Florida Avenue
    - Tampa, Florida USA 33602-2902
    - Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
    - Website: www.chemtelinc.com