1. **Product and Company Identification**
   - **Product Name:** Haynes Anti-Seize
   - **Chemical Name:** N/A
   - **Chemical Family:** Petroleum Based Grease
   - **Manufacturer:** Haynes Manufacturing Co.
     24142 Detroit Road
     Westlake, Ohio  44145, USA
   - **Emergency Telephone Number:**
     - 1-800-992-2166 X195
     - 1-440-871-2188 X195
   - **For MSDS, Product Safety, or Regulatory Inquiries call:**
     - 1-800-992-2166
     - 1-440-871-2188
   - **Customer Service:**
     - 1-800-992-2166
     - 1-440-871-2188
   - **Recommended Use:** No information available.
   - **Use Advised Against:** No information available.

2. **Hazards Identification**

   2.1. **Classification of the Substance or Mixture**
   - Not a dangerous substance or mixture according to OSHA 29 CFR 1910.1200

   2.2. **Label Elements**

      EMERGENCY OVERVIEW
      Not a dangerous substance or mixture according to OSHA 29 CFR 1910-1200

      | Appearance: No information available | Physical State: Solid | Odor: Petroleum |

      **Precautionary Statements – Storage**
      Not applicable

      **Precautionary Statements – Disposal**
      Not applicable

      **Hazards Not Otherwise Classified (HNOC)**
      Not applicable

      **Unknown Toxicity**
      93.09% of the mixture consists of ingredient(s) of unknown toxicity

2.3. **Other Information**

   May be harmful in contact with skin
3. Composition / Information of Ingredients

3.1. Substances
Not Applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight -%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide</td>
<td>1314-13-2</td>
<td>3-7%</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

4.1. Description of First Aid Measures

Eye Contact  
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact  
Wash skin with soap and water

Inhalation  
Remove to fresh air.

Ingestion  
Clean mouth with water and drink afterwards plenty of water.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptom  
No information available

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to Physician  
Treat symptomatically.

4.4. Reference to Other Sections

Reference to Other Sections  
Section 8: Exposure Controls/Personal Protection  
Section 11: Toxicological Information

5. Fire Fighting Measures

5.1. Extinguishing Media
Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

UnSuitable Extinguishing Media
Caution: Use of water spray when fighting fire may be inefficient.

5.2. Special Hazards Arising from the Substance or Mixture

Specific Hazards Arising from the Chemical
No Information available.

Explosion Data
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

5.3. Advise for Firefighters

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions
Use personal protective equipment as required.

6.2. Environmental Precautions

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground, or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

6.3. Methods and Material for Containment and Cleaning Up

Methods of Containment
Prevent further leakage or spillage if safe to do so.

Methods of Cleaning Up
Dam up. Clean contaminated surface thoroughly. Use personal protective equipment as required. Cover liquid spill with sand, earth, or other non-combustible absorbent material. Take up
mechanically, placing in appropriate containers for disposal.

6.4. Reference to Other Sections

Reference to Other Sections Section 8: Exposure Controls/Personal Protection
Section 7: Handling and Storage
Section 13: Disposal Considerations

7. Handling and Storage

7.1. Precautions for Safe Handling

Advice on Safe Handling Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

Incompatible Materials None known based on information supplied.

7.3. Specific End Use(s)

Other Information No information available.

7.4. Reference to Other Sections

Reference to Other Sections: Section 13: Disposal Considerations
Section 10: Stability and Reactivity

8. Exposure Controls / Personal Protection

8.1. Control Parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>NIOSH IDLH</th>
<th>OSHA PEL</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide 1314-13-2</td>
<td>STEL: 10 mg/m³ respirable fraction TWA: 2 mg/m³ respirable fraction</td>
<td>IDLH: 500 mg/m³ Ceiling: 15 mg/m³ dust TWA: 5 mg/m³ dust and fume STEL: 10 mg/m³</td>
<td>TWA: 5 mg/m³ fume TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction</td>
<td>TWA: 5 mg/m³ TWA: 10 mg/m³ STEL: 10 mg/m³</td>
</tr>
</tbody>
</table>
### 8.2. Exposure Controls

**Engineering Controls**
- Showers
- Eyewash stations
- Ventilation systems

**Personal protective equipment [PPE]**

**Eye/Face Protection**
Wear safety glasses with side shields (or googles).

**Skin and Body Protection**
Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.

**Respiratory Protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**
When using do not eat, drink, or smoke. Wash contaminated clothing before reuse.

### 9. Physical and Chemical Properties

#### 9.1. Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks-Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>White</td>
<td></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Petroleum</td>
<td></td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Melting Point/Freezing Point</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>$&gt;215.6^\circ C/&gt;420^\circ F$</td>
<td></td>
</tr>
</tbody>
</table>
Evaporation Rate: No information available
Flammability (solid, gas): No information available
Flammability Limits in Air:
  Upper Flammability Limits: No information available
  Lower Flammability Limits: No information available
Vapor Pressure: No information available
Vapor Density: No information available
Specific Gravity: No information available
Water Solubility: No information available
Solubility in Other Solvents: No information available
Partition Coefficient: No information available
Autoignition Temperature: No information available
Decomposition Temperature: No information available
Kinematic Viscosity: No information available
Dynamic Viscosity: No information available
Explosive Properties: No information available
Oxidizing Properties: No information available

9.2. Other Information
Softening Point: No information available
Molecular Weight: No information available
Solvent Content (%): No information available
Solid Content (%): 100.0
Density: .970 g/cm³
VOC: No information available

10. Stability and Reactivity

10.1. Reactivity
None under normal use conditions.

10.2. Chemical Stability
Stable under recommended storage conditions.

10.3. Possibility of Hazardous Reactions
None under normal processing.

10.4. Conditions to Avoid
Extremes of temperature and direct sunlight.

10.5. Incompatible Materials
None known based on information supplied.

10.6. Hazardous Decomposition Products
None known based on information supplied.
11. Toxicological Information

11.1. Information on Toxicological Effects

Product Information

**Inhalation**
No data available

**Eye Contact**
No data available

**Skin Contact**
No data available

**Ingestion**
No data available

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide 1314-13-2</td>
<td>&gt;5000 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

**Symptoms**
No information available

**Skin Corrosion/Irritation**
No information available

**Serious Eye Damage/Eye Irritation**
No information available

**Irritation**
No information available

**Corrosivity**
No information available

**Sensitization**
No information available

**Germ Cell Mutagenicity**
No information available

**Reproductive Toxicity**
No information available

**Developmental Toxicity**
No information available

**Teratogenicity**
No information available

**STOT-Single Exposure**
No information available

**STOT-Repeated Exposure**
No information available

**Chronic Toxicity**
No information available

**Target Organ Effects**
Respiratory system

**Aspiration Hazard**
No information available

**Carcinogenicity**
This product does not contain any carcinogens or potential carcinogens as listed by ACGIH, OSHA, IARC, or NTP.

12. Ecological Information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide 1314-13-2</td>
<td>LC50 (96h) = 0.7 mg/L Fish (Danio rerio)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulative Potential

No information available.

12.4. Mobility in Soil

No information available.

12.5. Results of PBT and vPvB Assessment

No information available.

12.6. Other Adverse Effects

No information available.

13. Disposal Considerations

13.1. Waste Treatment Methods

Disposal of Wastes
It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Contaminated Packaging
Dispose of in accordance with federal, state, and local regulations.

14. Transport Information

<table>
<thead>
<tr>
<th>DOT</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA</td>
<td>Not regulated</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>

15. Regulatory Information

Global Inventories

<table>
<thead>
<tr>
<th>TSCA</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>Listed</td>
</tr>
</tbody>
</table>

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
Listed - The components of this product are either listed or exempt from listing on inventory.
Not Listed - One or more components of this product are not listed on inventory.

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
Non-controlled.

United States of America

SARA 313
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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide</td>
<td>1314-13-2</td>
</tr>
</tbody>
</table>

California Proposition 65
This product does not contain one or more substances listed on Proposition 65 at or above 0.01 wt %.

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU
This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation.

EU-REACH (1907/2006) – Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59
This product does not contain a substance(s) on the SVHC as proposed by ECHA above a concentration of 0.1 wt %.

16. Other Information

HMIS
Safety Data Sheet
HAYNES ANTI-SEIZE
Haynes Manufacturing Company

Health Hazards 1  Flammability 1  Physical Hazards 0  Personal Protection X

Key or Legend to Abbreviations and Acronyms Used in the Safety Data Sheet
No information available

Key Literature Reference and Sources for Data
No information available

Revision Date: October 30, 2014
Revision Note: Not applicable
Training Advice: No information available
Further Information: No information available

Prepared By:

Haynes Manufacturing Company
24142 Detroit Road
Westlake, Ohio 44145

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