SAFETY DATA SHEET

This SDS conforms to REACH SDS CLP regulation 2015/830.

Issuing Date 06-Feb-2012  Revision Date 24-Aug-2018  Revision Number 6

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

1.1. Product identifier

Product Code(s) 221
(M)SDS Number WPS-JLI-003
Product Name API-MODIFIED

Chemical name

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Sealant. Lubricants, Greases and Release Products.
Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Supplier Address Jet Lube LLC
930 Whitmore Drive
Rockwall, Texas USA 75087
Supplier Phone Number US Office: Phone:+1-972-771-1000 Fax:+1-972-722-2108
Supplier Email Sales@jetlube.com

Importer
Jet-Lube (UK) Ltd
City Park, Watchmead
Welwyn Garden City, Hertfordshire
AL7 1LT
United Kingdom

Manufacturer
Jet Lube LLC
930 Whitmore Drive
Rockwall, Texas USA 75087

For further information, please contact...

Responsible Persons Regulatory & Laboratory Team Member(s)
E-mail Address regulatory@whitmores.com regulatory@jetlube.com
Non-Emergency Telephone +44-1628-631913 (JL UK Office)
Number +1-972-771-1000 (USA Office)
1.4. Emergency telephone number

Emergency Telephone Number  44 1628-631913

<table>
<thead>
<tr>
<th>Emergency telephone §45 - (EC)1272/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Europe</strong></td>
</tr>
<tr>
<td><strong>Austria</strong></td>
</tr>
<tr>
<td>Poison Information Center (AT): +43-(0)1-406 43 43</td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
</tr>
<tr>
<td>Poison Center (BE): +32 70 245 245</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
</tr>
<tr>
<td>Poison Control Hotline (DK): +45 82 12 12 12</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
</tr>
<tr>
<td>Poison Information Centre (FI): +358 9 471 977</td>
</tr>
<tr>
<td><strong>France</strong></td>
</tr>
<tr>
<td>ORFILA (FR): + 01 45 42 59 59</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
</tr>
<tr>
<td>Poison Center Berlin (DE): +49 030 30686 790 (24 h service, Advice in German and English)</td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
</tr>
<tr>
<td>National Poisons Information Centre (IE): +353 1 8379964</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
</tr>
<tr>
<td>Poison Center, Milan (IT): +39 02 6610 1029</td>
</tr>
<tr>
<td><strong>Netherlands</strong></td>
</tr>
<tr>
<td>National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
</tr>
<tr>
<td>Poisons Information (NO): + 47 22 591300</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
</tr>
<tr>
<td>Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97</td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
</tr>
<tr>
<td>Poison Information Center (PT): +351 21 330 3284</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
</tr>
<tr>
<td>Poison Information Service (ES): +34 91 562 04 20</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
</tr>
<tr>
<td>Poisons Information Center (SV): +46 8 33 12 31</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
</tr>
<tr>
<td>Poison Center (CH): Tel 145: +41 44 251 51 51</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
</tr>
<tr>
<td>NHS Direct (UK): +44 0845 46 47</td>
</tr>
</tbody>
</table>

Section 2: Hazards Identification

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Regulation (EC) No 1272/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
</tr>
<tr>
<td>Category 4 - (H302)</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
</tr>
<tr>
<td>Category 1B - (H360D)</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
</tr>
<tr>
<td>Category 2 - (H373)</td>
</tr>
<tr>
<td>Acute aquatic toxicity</td>
</tr>
<tr>
<td>Category 1 - (H400)</td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
</tr>
<tr>
<td>Category 1 - (H410)</td>
</tr>
</tbody>
</table>

2.2. Label elements

Signal word  Danger

Hazard Statements
Precautionary Statements - EU (§28, 1272/2008)
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330 - Rinse mouth
P501 - Dispose of contents/container to an approved waste disposal plant
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves and eye/face protection
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P273 - Avoid release to the environment
P391 - Collect spillage

2.3. Other hazards
No information available

Section 3: Composition/Information

3.1 Substances
Not applicable.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC No</th>
<th>CAS-No</th>
<th>Weight-%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>REACH Reg. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm)</td>
<td>231-100-4</td>
<td>7439-92-1</td>
<td>30-35</td>
<td>Repr. 1B (H360D) STOT RE 1 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
<td>01-2119513221-59-0061</td>
</tr>
<tr>
<td>Graphite</td>
<td>231-955-3</td>
<td>7782-42-5</td>
<td>15-20</td>
<td>No data available</td>
<td>01-2119486977-12</td>
</tr>
<tr>
<td>Zinc (powder)</td>
<td>231-175-3</td>
<td>7440-66-6</td>
<td>10-15</td>
<td>Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
<td>01-2119467174-37</td>
</tr>
</tbody>
</table>

Full text of H- and EUH-phrases: see section 16

Note
The producer of "74869-21-9" declares that it contains less than 3% DMSO extractable material by IP-346 The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)
4.1. **Description of first aid measures**

**General advice**
Show this safety data sheet to the doctor in attendance. IF exposed or concerned:
Get medical advice/attention.

**Inhalation**
If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. If symptoms persist, call a physician.

**Skin contact**
Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

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

**Ingestion**
Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

**Self-protection of the first aider**
Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

4.2. **Most important symptoms and effects, both acute and delayed**

**Symptoms**
Coughing and/or wheezing. Difficulty in breathing.

4.3. **Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

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**Section 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**
No information available.

5.2. **Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical**
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous Combustion Products**
Carbon oxides.

5.3. **Advice for firefighters**

**Special protective equipment for fire-fighters**
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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**Section 6: Accidental release measures**
6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid breathing vapors or mists.

Other Information
Refer to protective measures listed in Sections 7 and 8.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions
Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections
See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations
Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

7.3. Specific end use(s)

Risk Management Methods (RMM)
The information required is contained in this Material Safety Data Sheet.

Section 8: Exposure control/personal protection equipment

8.1. Control parameters

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EU</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle)</td>
<td>TWA: 0.15 mg/m³</td>
<td>TWA: 0.15 mg/m³</td>
<td>TWA: 0.1 mg/m³</td>
<td>TWA: 0.15 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>STEL: 0.45 mg/m³</td>
<td>Repr*</td>
<td>Repr*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------</td>
<td>-------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>-</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphite 7782-42-5</td>
<td>STEL: 30 mg/m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STEL: 12 mg/m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA: 10 mg/m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA: 4 mg/m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Italy</th>
<th>Portugal</th>
<th>Netherlands</th>
<th>Finland</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>TWA: 0.075 mg/m³</td>
<td>TWA: 0.15 mg/m³</td>
<td>TWA: 0.15 mg/m³</td>
<td>TWA: 0.1 mg/m³</td>
<td>TWA: 0.05 mg/m³</td>
</tr>
<tr>
<td>Graphite 7782-42-5</td>
<td>TWA: 2 mg/m³</td>
<td>-</td>
<td></td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2.5 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>STEL: 0.4 mg/m³</td>
<td>STEL: 0.8 mg/m³</td>
<td>TWA: 0.05 mg/m³</td>
<td>TWA: 0.05 mg/m³</td>
<td>TWA: 0.15 mg/m³</td>
</tr>
<tr>
<td>Graphite 7782-42-5</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 4.0 mg/m³</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 10 mg/m³</td>
</tr>
<tr>
<td>Zinc (powder) 7440-66-6</td>
<td>STEL: 0.4 mg/m³</td>
<td>STEL: 0.1 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Romania</th>
<th>Ukraine TLVs</th>
<th>Sweden TLVs</th>
<th>Hungary</th>
<th>Turkey TLVs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>TWA: 0.05 mg/m³</td>
<td>STEL: 0.10 mg/m³</td>
<td>TWA: 0.15 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphite 7782-42-5</td>
<td>TWA: 2 mg/m³</td>
<td>LLV: 5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>European Union</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>Lead 70 µg/100mL no restriction Lead 0.075 mg/m³ 40 hours per week</td>
<td>-</td>
<td>400 µg/L blood Lead biological limit value, men 300 µg/L blood Lead biological limit value, women 200 µg/L blood Lead medical surveillance value, men 100 µg/L blood Lead medical surveillance</td>
<td>70 µg/dL blood not critical Lead 3,K</td>
<td>300 µg/L whole blood no restriction Lead women age below 45 years 400 µg/L whole blood no restriction Lead women 45 years and older</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Italy</td>
<td>Portugal</td>
<td>Netherlands</td>
<td>Finland</td>
<td>Denmark</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------------------------</td>
<td>----------</td>
<td>-------------</td>
<td>----------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>60 Pb µg/100mL blood end of workweek</td>
<td>Lead remediation must be performed when workers of fertile age have Lead in blood levels &gt;40 µg/100 mL; Lead monitoring assessments must be done when Lead levels are &gt;0.075 mg/m³ at the end of a workweek, and the Lead in blood level of a single worker is &gt;40 µg/100 mL. (ACGIH:) 30 µg/100mL blood not critical Lead</td>
<td>1.4 µmol/L blood not critical Lead</td>
<td>20 µg/100mL blood Lead</td>
<td></td>
</tr>
<tr>
<td>Note: Women of child bearing potential, whose blood Pb exceeds 10 µg/dL, are at risk of delivering a child with a blood Pb over the current Centers for Disease Control guideline of 10 µg/dL. If the blood Pb of such children remains elevated, they may be at increased risk of cognitive deficits. The blood Pb of these children should be closely monitored and appropriate steps should be taken to minimize the child's exposure to environmental lead.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Lead (powder particle diameter <1mm) 7439-92-1

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>-</td>
<td>400</td>
<td>-</td>
<td>-</td>
<td>70 µg/100mL blood not critical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td></td>
<td></td>
<td>Lead Binding Limit Value, Mandatory monitoring required as per SHWW chemical agents regulations for BLV</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40 µg/100mL blood not critical</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lead health surveillance is carried out if &gt;40 µg/100mL of blood is measured in individual employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 µg/100mL blood not critical</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lead lower SCOEL recommendation</td>
</tr>
</tbody>
</table>

**Derived No Effect Level (DNEL)**  No information available

**Predicted No Effect Concentration (PNEC)**  No information available

#### 8.2. Exposure controls

**Personal protective equipment**

- **Eye/face protection**: Tight sealing safety goggles.
- **Skin and body protection**: Wear suitable protective clothing.

**Environmental exposure controls**  No information available.

### Section 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</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>232 °C</td>
<td>None known</td>
<td></td>
</tr>
</tbody>
</table>

**Physical state**: Paste / Gel

**Appearance**: Copper Bronze

**Odor**: Petroleum

**Color**: No information available

**Odor Threshold**: No data available
9.2. Other information

- Boiling point / boiling range: 260 °C
- Flash Point: > 221 °C
- Evaporation Rate: No data available
- Molecular Weight: No information available
- Flammability (solid, gas): No data available
- Flammability Limit in Air: None
- Upper flammability limit: 7%
- Lower flammability limit: 0.9%
- Vapor pressure: &<0.01&20
- Vapor density: >5
- Relative density: 2.0
- Water Solubility: Negligible
- Solubility(ies): No data available
- Partition coefficient: n-octanol/water: Not Applicable
- Autoignition temperature: >260 °C
- Decomposition temperature: No data available
- Kinematic viscosity: No data available
- Viscosity: No data available

9.2. Other information

- Softening Point: No information available
- Molecular Weight: No information available
- VOC Content (%): None
- Liquid Density: No information available
- Bulk Density: No information available
- Particle Size: No information available
- Particle Size Distribution: No information available

Section 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

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

10.3. Possibility of hazardous reactions

- Possibility of Hazardous Reactions: None under normal processing.
- Hazardous Polymerization: Hazardous polymerization does not occur.

10.4. Conditions to avoid

Excessive heat.

10.5. Incompatible materials

No information available.
10.6. Hazardous decomposition products

Carbon oxides.

### Section 11: Toxicological information

#### 11.1. Information on toxicological effects

**Information on likely routes of exposure**

**Product Information**

- **Inhalation**: Specific test data for the substance or mixture is not available.
- **Eye contact**: Specific test data for the substance or mixture is not available. May cause slight eye irritation.
- **Skin contact**: Specific test data for the substance or mixture is not available. May cause irritation.
- **Ingestion**: Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

**Information on toxicological effects**

**Symptoms**

No information available.

**Numerical measures of toxicity**

**Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

<table>
<thead>
<tr>
<th></th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc (powder)</td>
<td>= 630 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Unknown acute toxicity**

No information available

**Component Information**

- **Chemical Name**: Zinc (powder)
  - **LD50 Oral**: = 630 mg/kg (Rat)

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

- **Skin corrosion/irritation**: Classification based on data available for ingredients. Irritating to skin.
- **Serious eye damage/eye irritation**: Classification based on data available for ingredients. Irritating to eyes.
- **Respiratory or skin sensitization**: No information available.
- **Germ cell mutagenicity**: No information available.
Carcinogenicity  
No information available.

Reproductive Toxicity  
Contains a known or suspected reproductive toxin.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EU - Annex VI Reproductive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm)</td>
<td>Category 3</td>
</tr>
<tr>
<td></td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Developmental Toxicity  
Contains ingredients that have suspected developmental hazards

STOT - single exposure  
No information available.

STOT - repeated exposure  
Classification based on data available for ingredients. Causes damage to organs through prolonged or repeated exposure.

Causes damage to the following organs through prolonged or repeated exposure: Cardiovascular system, Central nervous system, Hematopoietic System, Immune system, Kidneys, Peripheral Nervous System.

Aspiration hazard  
No information available.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity  
Very toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm)</td>
<td></td>
<td>LC50 96 h: 0.44 mg/L semi-static (Cyprinus carpio)</td>
<td></td>
<td>EC50 48 h: 600 µg/L (water flea)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 96 h: 1.17 mg/L flow-through (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 96 h: 1.32 mg/L static (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc (powder)</td>
<td></td>
<td>LC50 96 h: 0.211-0.269 mg/L semi-static (Pimephales promelas)</td>
<td></td>
<td>EC50 48 h: 0.139 - 0.908 mg/L Static (Daphnia magna)</td>
</tr>
<tr>
<td>EC50 72 h: 0.09 - 0.125 mg/L static (Pseudokirchneriella subcapitata)</td>
<td></td>
<td>LC50 96 h: 2.16-3.05 mg/L flow-through (Pimephales promelas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC50 96 h: 0.11 - 0.271 mg/L static (Pseudokirchneriella subcapitata)</td>
<td></td>
<td>LC50 96 h: 0.24 mg/L flow-through (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 96 h: 0.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

Persistence and Degradability  No information available.

12.3. Bioaccumulative potential

Bioaccumulation  Some components of this material have some potential to bioaccumulate.

12.4. Mobility in soil

Mobility in soil  No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment  No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>PBT and vPvB assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm)</td>
<td>PBT assessment does not apply</td>
</tr>
<tr>
<td>Graphite</td>
<td>The substance is not PBT / vPvB PBT assessment does not apply</td>
</tr>
<tr>
<td>Zinc (powder)</td>
<td>The substance is not PBT / vPvB PBT assessment does not apply</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects

Other adverse effects  No information available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused  Dispose of in accordance with local regulations. Dispose of waste in accordance
products with environmental legislation.

Contaminated packaging No information available.

### Section 14: Transport information

#### IMDG

<table>
<thead>
<tr>
<th>14.1 UN Number</th>
<th>UN3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 Proper Shipping Name</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
</tr>
<tr>
<td>Description</td>
<td>UN3082, Environmentally hazardous substance, liquid, n.o.s. (Lead, Zinc (powder)), 9, III, Marine Pollutant</td>
</tr>
<tr>
<td>14.3 Hazard Class</td>
<td>9</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Marine Pollutant</td>
<td>Product is a marine pollutant according to the criteria set by IMDG/IMO</td>
</tr>
<tr>
<td>Environmental hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>14.6 Special Provisions</td>
<td>None</td>
</tr>
<tr>
<td>EmS-No.</td>
<td>F-A, S-F</td>
</tr>
<tr>
<td>14.7 Transport in bulk</td>
<td>No information available</td>
</tr>
</tbody>
</table>

According to Annex II of MARPOL and the IBC Code

#### RID

<table>
<thead>
<tr>
<th>14.1 UN-No.</th>
<th>UN3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 Proper Shipping Name</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
</tr>
<tr>
<td>Description</td>
<td>UN3082, Environmentally hazardous substance, liquid, n.o.s. (Lead, Zinc (powder)), 9, III</td>
</tr>
<tr>
<td>14.3 Hazard Class</td>
<td>9</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>14.6 Special Provisions</td>
<td>None</td>
</tr>
</tbody>
</table>

Classification code M6

#### ADR

<table>
<thead>
<tr>
<th>14.1 UN-No.</th>
<th>UN3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 Proper Shipping Name</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
</tr>
<tr>
<td>Description</td>
<td>UN3082, Environmentally hazardous substance, liquid, n.o.s. (Lead, Zinc (powder)), 9, III(E)</td>
</tr>
<tr>
<td>14.3 Hazard Class</td>
<td>9</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>14.6 Special Provisions</td>
<td>None 274, 335, 601, 375</td>
</tr>
</tbody>
</table>

Classification code M6

Tunnel restriction code (E)

#### IATA

<table>
<thead>
<tr>
<th>14.1 UN Number</th>
<th>UN3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 Proper Shipping Name</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
</tr>
<tr>
<td>Description</td>
<td>UN3082, Environmentally hazardous substance, liquid, n.o.s. (Lead, Zinc (powder)), 9, III</td>
</tr>
<tr>
<td>14.3 Hazard Class</td>
<td>9</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazard</td>
<td>Yes</td>
</tr>
</tbody>
</table>
14.6 Special Provisions
None

ERG Code
9L

Section 15: Regulatory information

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

National regulations

France
Occupational Illnesses (R-463-3, France)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>French RG number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>RG 1</td>
<td>-</td>
</tr>
<tr>
<td>Graphite 7782-42-5</td>
<td>RG 16</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>RG 25</td>
<td>-</td>
</tr>
<tr>
<td>Zinc (powder) 7440-66-6</td>
<td>RG 61</td>
<td>-</td>
</tr>
</tbody>
</table>

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Restricted substance per REACH Annex XVII</th>
<th>Substance subject to authorization per REACH Annex XIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (powder particle diameter &lt;1mm) 7439-92-1</td>
<td>Use restricted. See item 63. Use restricted. See item 30.</td>
<td></td>
</tr>
</tbody>
</table>

Persistent Organic Pollutants
Not applicable.

Dangerous substance category per Seveso Directive (2012/18/EU)
E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies.</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies.</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Complies.</td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies.</td>
</tr>
<tr>
<td>IECSC</td>
<td>Contact supplier for inventory compliance status.</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies.</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies.</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies.</td>
</tr>
</tbody>
</table>
Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCs - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No information available.

Section 16: Other Information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under sections 2 and 3
H302 - Harmful if swallowed
H360D - May damage the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend
SVHC: Substances of Very High Concern for Authorization:

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value - Skin designation

Key literature references and sources for data
www.ChemADVISOR.com/

Prepared By Product Stewardship
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Latham, NY 12110
1-800-572-6501

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End of Safety Data Sheet