NICKEL-GRAF™ AEROSOL
Nickel and Graphite Anti-Seize Compound
Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name: Aerosol Nickel-Graf™ Anti-Seize

Manufacturer: Anti-Seize Technology
2345 N. 17th Ave.
Franklin Park, IL 60131
Phone: 847-455-2300
Toll Free: 800 991-1106
Web: antiseize.com

Emergency Phone Number: Infotrac 24/7 Phone: 1-800-535-5053 (US & Canada)
or 352-323-3500 (International)

Product Use: Anti-Seize Compound
Restriction on Use: Use only as directed

SDS Date of Preparation: December 19, 2017

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification (Hazcom 2012):
Flammable Aerosol Category 1
Gases Under Pressure – Compressed Gas
Skin Irritation Category 2
Skin Sensitization Category 1
Eye Irritation Category 2A
Aspiration Hazard Category 1
Specific Target Organ Toxicity – Single Exposure Category 3 (Narcotic effects)
Contains a suspected carcinogen Category 2

Label Elements:

Signal Word: DANGER
Hazard Phrases:
Suspected of causing cancer through inhalation
Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
Causes skin irritation.
Causes serious eye irritation.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.

Precautionary Phrases:
Prevention:
Do not handle until all safety precautions have been read.
Wash thoroughly after handling.
Wear protective gloves, eye and face protection.
Avoid breathing mist or spray.
Use only outdoors or in a well-ventilated area.
Take off contaminated clothing and wash it before reuse.
Keep away from heat, sparks, open flames or hot surfaces. No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.

Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical attention.
IF ON SKIN: Wash with soap and water.
If skin irritation occurs: Get medical attention.
IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Do NOT induce vomiting
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.

Storage
Store in a well-ventilated place.
Store locked up.
Protect from sunlight
Store at temperatures not exceeding 122°F (50°C)

Disposal
Dispose of contents in accordance with local, regional and national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>20-30</td>
</tr>
<tr>
<td>Heptane</td>
<td>142-82-5</td>
<td>15-25</td>
</tr>
<tr>
<td>Distillates (petroleum), solvent-dewaxed heavy paraffinic</td>
<td>64742-65-0</td>
<td>8-12</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>8-12</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>5-15</td>
</tr>
<tr>
<td>Chemical</td>
<td>UN Number</td>
<td>Flammability</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>5-15</td>
</tr>
<tr>
<td>Nickel</td>
<td>7740-02-0</td>
<td>5-15</td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>3-7</td>
</tr>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>1-3</td>
</tr>
</tbody>
</table>

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

**SECTION 4: FIRST AID MEASURES**

**Eye:** Immediately flush eyes with water, holding the eyelids apart. Get medical attention if irritation develops or persists.

**Skin:** In case of contact, wash thoroughly with plenty of water. Get medical attention if irritation persists.

**Inhalation:** Remove to fresh air and keep comfortable for breathing. If irritation occurs, get medical attention.

**Ingestion:** Aspiration Hazard. DO NOT induce vomiting. Get immediate medical attention.

**Most Important symptoms and effects, both acute and delayed:** Causes eye and skin irritation. Product is an aspiration hazard. May enter the lungs during swallowing or vomiting and cause lung damage. Inhalation may cause irritation, headache, dizziness and drowsiness.

**Indication of any immediate medical attention and special treatment needed:** Immediate medical attention required for ingestion.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable and Unsuitable Extinguishing Media:** Use water spray or fog, foam, carbon dioxide or dry chemical.

**Special Hazards Arising from the Chemical:** Extremely flammable aerosol. Keep away from heat and open flames. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120°F may cause cans to burst. Combustion may produce carbon dioxide, carbon monoxide.

**Special Equipment and Precautions for Fire-Fighters:** Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Protect against bursting cans.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate personal protective equipment. Eliminate all sources of ignition with explosion-proof
equipment. Ventilate area.

**Environmental Hazards:** Report spills and releases as required to appropriate authorities.

**Methods and Material for Containment and Cleaning Up:** Place leaking container into a suitable container and place in a well-ventilated area until the propellant has dissipated. Collect liquid spill with an inert absorbent material and place into a suitable container for disposal.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid breathing vapors and mists. Use with adequate ventilation. Keep away from heat sources. Contents under pressure. Do not puncture or incinerate container. Do not smoke while using.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, well-ventilated area at temperatures below 120°F. Do not store in direct sunlight.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane</td>
<td>400 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td></td>
<td>500 ppm STEL ACGIH TLV</td>
</tr>
<tr>
<td></td>
<td>500 ppm TWA OSHA PEL</td>
</tr>
<tr>
<td>Distillates (petroleum), solvent-dewaxed heavy paraffinic</td>
<td>5 mg/m3 TWA ACGIH TLV (inhalation)</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>5 mg/m3 TWA ACGIH TLV (inhalation)</td>
</tr>
<tr>
<td>Propane</td>
<td>1000 ppm TWA OSHA PEL</td>
</tr>
<tr>
<td>Butane</td>
<td>1000 ppm STEL ACGIH TLV</td>
</tr>
<tr>
<td>Nickel Powder</td>
<td>1.5 mg/m3 TWA ACGIH TLV (inhalable)</td>
</tr>
<tr>
<td></td>
<td>1 mg/m3 TWA OSHA PEL</td>
</tr>
<tr>
<td>Graphite</td>
<td>2 mg/m3 TWA ACGIH TLV respirable</td>
</tr>
<tr>
<td></td>
<td>15 mg/m3 TWA OSHA PEL total dust</td>
</tr>
<tr>
<td></td>
<td>5 mg/m3 TWA OSHA PEL respirable fraction</td>
</tr>
<tr>
<td>Aluminum, dust or fume</td>
<td>1 mg/m3 TWA ACGIH TLV</td>
</tr>
<tr>
<td></td>
<td>15 mg/m3 TWA OSHA PEL total dust</td>
</tr>
<tr>
<td></td>
<td>5 mg/m3 TWA OSHA PEL respirable fraction</td>
</tr>
</tbody>
</table>

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the exposure limits.

**Individual Protection Measures:**

**Respiratory Protection:** In operations where the occupational exposure limits are exceeded, a NIOSH approved respirator with organic vapor/particulate cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene.
practice.

**Skin Protection:** Impervious gloves such as nitrile recommended where needed to avoid skin contact.

**Eye Protection:** Safety goggles recommended where needed to avoid eye contact.

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th><strong>Appearance:</strong></th>
<th>Aerosol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vapor Density (air = 1):</strong></td>
<td>&gt;1</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Mild odor</td>
</tr>
<tr>
<td><strong>Specific Gravity:</strong></td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Odor Threshold:</strong></td>
<td>Not established</td>
</tr>
<tr>
<td><strong>Water Solubility:</strong></td>
<td>Not soluble</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Octanol/Water Partition Coefficient:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Melting Point/Freezing Point:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Autoignition Temperature:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong></td>
<td>-44 to 208 °F</td>
</tr>
<tr>
<td><strong>Decomposition Temperature:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flash Point:</strong></td>
<td>-141 °F (propellant)</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Evaporation Rate:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosion Properties:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Flammable Limits:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LEL:</strong></td>
<td>Not established</td>
</tr>
<tr>
<td><strong>UEL:</strong></td>
<td>Not established</td>
</tr>
<tr>
<td><strong>Vapor Pressure:</strong></td>
<td>No data</td>
</tr>
<tr>
<td><strong>Aerosol Fire Protection Level:</strong></td>
<td>Level 2</td>
</tr>
<tr>
<td><strong>Aerosol (NFPA 30B):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VOC Content:</strong></td>
<td>39.81%</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
<td>Propellant if a flammable gas</td>
</tr>
</tbody>
</table>

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### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Not reactive under normal conditions of use.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** None known

**Conditions to Avoid:** Keep away from heat, sparks, flames and other sources of ignition.
Dropping containers may cause bursting.

**Incompatible Materials:** Avoid strong oxidizing agents and acids.

**Hazardous Decomposition Products:** Thermal decomposition may produce carbon dioxide, carbon monoxide.

### SECTION 11: TOXICOLOGICAL INFORMATION

**Potential Health Effects:**

**Eye:** Causes serious eye irritation.

**Skin:** Contact may cause irritation and drying of the skin.

**Inhalation:** Mist or vapor can irritate the throat and lungs. High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

**Ingestion:** If swallowed, this material may cause irritation of the mouth, throat and esophagus. Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea, dizziness, drowsiness and other central nervous system effects. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

**Chronic Hazards:** None known.

**Carcinogen Status:**

**NTP:** Anticipated carcinogen  
**IARC:** Group 2B  
**OSHA:** No

**Acute Toxicity Values:**

Hexane: Oral rat LD50 >5000 mg/kg, inhalation rat LC50 ≥ 29.29 mg/L, dermal rabbit LD50 >2000 mg/kg  
Distillates (petroleum), solvent-dewaxed heavy paraffinic: Oral rat LD50 > 5000 mg/kg  
Inhalation rat LC50: 2.18 mg/L, Dermal rabbit LD50 > 2000 mg/kg  
Distillates (petroleum), hydrotreated heavy naphthenic: Oral rat LD50 > 5000 mg/kg, Inhalation rat LC50: 1.8 mg/L, dermal rabbit LD50 > 2000 mg/kg  
Nickel Powder: Oral rat LD50 > 9000 mg/kg  
Graphite: Oral rat LD50 > 2000 mg/kg, inhalation rat LC50 > 2 mg/L  
Aluminum Powder: Oral rat LD50 > 15900 mg/kg, inhalation rat LC50 > 0.888 mg/L
SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Nickel Powder: Oncorhynchus mykiss LC50: 15.3 mg/L/96hr, Pimephales promelas NOEC: 0.057 mg/L/32days

Graphite: Danio rerio LC50 > 100 mg/L/96hr

Distillates (petroleum), hydrotreated heavy naphthenic: Pimephales promelas LL50 > 100 mg/L/96hr.

Aluminum Powder: Lepomis cyanellus NOEC > 50 mg/L/96hr

Persistence and Degradability: Acetone and hexane are readily biodegradable.

Bioaccumulative Potential: Acetone is not Bioaccumulative. Hexane may bioaccumulate based on a log Kow of 4.66

Mobility in Soil: No data available

Other Adverse Effects: None known

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, regional and national regulations. Do not puncture or incinerate containers. When contents are depleted, continue to depress button until all gas is expelled.

SECTION 14: TRANSPORT INFORMATION

DOT Proper Shipping Name: UN1950, Aerosols, 2.1 Limited Quantity
DOT Technical Name: None
DOT Hazard Class: 2.1
UN Number: UN1950
DOT Labels Required (49CFR172.101): LTD QTY

IMDG Shipping Description: UN1950, Aerosols, 2.1, Limited Quantity,
ID Number: UN1950
Hazard Class: 2.1
Packing Group: None
Labels Required: None
Marking Required: Limited Quantity Mark
Placards Required: Limited Quantity

SECTION 15: REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA Hazardous Substances (Section 103)/RQ: This product has an RQ of 16,666 lbs based on the RQ for acetone of 5000 lbs. In addition, oil spills are reportable to the National
Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

This product has a Reportable Quantity (RQ) of 500 lbs. based on the RQ for Nickel of 100 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**SARA Hazard Category (311/312):** Fire Hazard, Pressure Hazard, Acute Health

**SARA 313:** This product contains the following chemicals regulated under SARA Title III, section 313: Aluminum Powder 1-5%, Nickel Powder 20-30%

**EPA TSCA Inventory:** All of the components of this product are listed on the TSCA inventory.

**CALIFORNIA PROPOSITION 65: **WARNING: This product can expose you to Nickel which is known to the State of California to cause cancer. For more information go to www.P65warnings.ca.gov

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**SECTION 16: OTHER INFORMATION**

**Revision Summary:** New format to comply with OSHA Hazcom 2012

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