Trade name: Aqua-Gel® CW Wire Pulling Lubricant

SECTION 1: Identification

Product identifier: Aqua-Gel® CW Wire Pulling Lubricant.
Synonyms: None available.
SDS number: ID003
Recommended use: Wire Pulling Lubricant.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
  Company Name: IDEAL INDUSTRIES, INC.
  Company Address: Becker Place, Sycamore, IL 60178
  Company Telephone: Office hours (Mon – Fri)
                     7AM - 5 PM (CDT)
                     (815)895-5181
  Company Contact Name: Darryl Docter.
  Company Contact Email: IDEAL@IDEALINDUSTRIES.COM
  Emergency phone number: 24 HOUR EMERGENCY NUMBER:
                           (815)895-5181.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards
Not classified as a physical hazard under GHS criteria

Health hazards
Skin corrosion/irritation, Category 2.
Serious eye damage/eye irritation, Category 2.

Environmental hazards
Not classified as a physical hazard under GHS criteria.

GHS Signal word: WARNING.
GHS Hazard statement(s):
Causes skin irritation.
Causes serious eye irritation.
GHS Hazard symbol(s):

GHS Precautionary statement(s):

Prevention:
- P264 - Wash skin thoroughly after handling.
- P280 - Wear protective gloves/eye protection/face protection.

Response:
- P302+P352 – If on skin: Wash with plenty of soap and water.
- P305 + P351 + P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.

Storage: No storage precautionary statements.

Disposal: No disposal precautionary statements.

Hazard(s) not otherwise Classified (HNOC): None known.

Percentage of ingredient(s) of unknown acute toxicity:
Not applicable.

SECTION 3: Composition/information on ingredients

Mixture:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS#</th>
<th>Concentration (weight %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydroxide (20% solution)</td>
<td>1310-58-3</td>
<td>&lt; 2%</td>
</tr>
</tbody>
</table>

Note: The balance of the ingredients are not classified as hazardous or below the threshold concentration, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.
SECTION 4: First-aid Measures

Description of necessary measures:
Inhalation: If inhaled, move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms persist.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and thoroughly clean before reuse. Get medical attention if symptoms persist.

Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms persist.

Ingestion: If swallowed, administer water or milk. Do NOT induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Consult physician or local poison control center.

Most important symptoms/effects, acute and delayed: Causes skin irritation. Causes serious eye irritation.

Indication of immediate medical attention and special treatment needed: If any symptoms are observed, contact a physician and give them this SDS sheet. If exposed or concerned: Get medical advice/attention.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Not flammable. Use extinguishing media suitable for surrounding materials.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: Extreme temperatures of combustion or burning and contact with nitrites could result in the formation of nitrosamines which are potential carcinogens. Combustion products - Carbon monoxide, Carbon dioxide. Oxides of Nitrogen.

Special protective equipment and precautions for fire-fighters: For fire involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Stay upwind and away from spill/release. For large spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate
protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

**Methods and material for containment and cleaning up:** Persons not wearing protective equipment should be excluded from area of spill until cleanup has been completed. Stop spill at source, wipe up, shovel or vacuum spilled material. Clean up spills immediately as they can be dangerously slippery. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required.

### SECTION 7: Handling and Storage

**Precautions for safe handling:** Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

**Conditions for safe storage, including any incompatibles:** Store at temperatures between -40 and 180°F. Keep away from children, infants and pets. Keep container(s) tightly closed and properly labeled. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

### SECTION 8: Exposure controls/personal protection

**Control Parameters:**

**Occupational exposure limits:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance</td>
<td>PEL-TWA (8 hour)</td>
<td>PEL-STEL (15 min)</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

| US ACGIH Threshold Limit Values |
|---------------------------------|-------------------------------|------------------------------|
| Substance                       | TLV-TWA (8 hour)              | TLV-STE (15 min)             |
| Potassium Hydroxide             | 2 mg/m³ Ceiling               | No data available            |

| NIOSH Exposure Limits |
|----------------------|-------------------------------|------------------------------|
| Substance            | TWA                           | STEL                         |
| Potassium Hydroxide  | 2 mg/m³ Ceiling               | No data available            |
Appropriate engineering controls: General (mechanical) room ventilation is expected to be adequate. Special local ventilation is suggested at points where vapors can be expected to escape to the workplace air or in enclosed areas.

Individual protection measures, such as personal protective equipment:

Eye/face protection: None normally required, but the use of OSHA compliant safety glasses or splash goggles recommended.

Skin and Hand protection: None normally needed - Neoprene if necessary. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: None normally required.

Other: Eye wash / eye bath in the work area is recommended but not necessary.

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Gel</td>
</tr>
<tr>
<td>Physical state</td>
<td>Gel</td>
</tr>
<tr>
<td>Form</td>
<td>Clear gel.</td>
</tr>
<tr>
<td>Color</td>
<td>Red</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild odor.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 – 8.0</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100°C (212°F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>None</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Flammability limit – lower (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability limit – upper (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limit – lower (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limit – upper (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.09-1.11</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Infinite.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>10000-15000 cps</td>
</tr>
</tbody>
</table>
Other information:
% Volatile by volume: < 45%
Percent solids by weight: ~ 60%

SECTION 10: Stability and Reactivity

Reactivity: Not chemically reactive.
Chemical stability: Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions: Hazardous reactions not anticipated.
Conditions to avoid: Avoid prolonged storage at temperatures exceeding 180°F. Extreme temperatures of combustion or burning and contact with nitrites could result in the formation of nitrosamines which are potential carcinogens.
Incompatible materials: Avoid contact with strong oxidizers and nitrates.
Hazardous decomposition Products: Oxides of carbon and nitrogen.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: Not an expected route of entry.
Ingestion: Not an expected route of entry.
Skin: May produce skin irritation.
Eyes: Not an expected route of entry.

Symptoms related to the physical, chemical, and toxicological characteristics:
Upon prolonged contact, may cause temporary eye discomfort.

Delayed and immediate effects and chronic effects from short or long-term exposure:
Detailed below.

Numerical measures of toxicity:

Ingredient Information:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test Type (species)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>LD₅₀ Oral (Rat)</td>
<td>273 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD₅₀ Dermal (Rabbit)</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Inhalation (Rat)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Product Acute Toxicity Estimates:
Acute Oral Toxicity – no data available
Acute Dermal Toxicity - no data available
Acute Inhalation Toxicity - no data available

Skin corrosion/irritation: This material may cause skin irritation.
Serious eye damage/eye irritation: Upon prolonged contact, may cause temporary eye discomfort.

Respiratory sensitization: No information available on the mixture, however none of the components have been classified as a respiratory sensitizer (or are below the concentration threshold for classification).

Skin sensitization: No information available on the mixture, however none of the components have been classified as a skin sensitizer (or are below the concentration threshold for classification).

Germ cell mutagenicity: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

Carcinogenicity: No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

Reproductive toxicity: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

Specific target organ toxicity-
Single exposure: No information available on the mixture, however none of the components have been classified for STOT SE (or are below the concentration threshold for classification).

Specific target organ toxicity-
Repeat exposure: No information available on the mixture, however none of the components have been classified for STOT RE (or are below the concentration threshold for classification).

Aspiration hazard: No information available on the mixture, however none of the components have been classified for aspiration hazard (or are below the concentration threshold for classification).
Further information: No data available.

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test Type</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium hydroxide</td>
<td>LC₅₀</td>
<td>Fish - Gambusia affinis (Mosquito fish)</td>
<td>85 mg/l (24h)</td>
</tr>
<tr>
<td></td>
<td>LC₅₀</td>
<td>Aquatic crustacea</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>EC₅₀</td>
<td>Algae</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Persistence and Degradability: No data available
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal instructions:
The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

SECTION 14: Transport Information

DOT: This material is not classified as dangerous under DOT regulations.

IATA: This material is not classified as dangerous under IATA regulations.

IMDG: This material is not classified as dangerous under IMDG regulations.
SECTION 15: Regulatory Information

Safety, health and environmental regulations specific for the product.

USA:
United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are listed, as required, on the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:
Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4:

<table>
<thead>
<tr>
<th>Component</th>
<th>Reportable Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydroxide</td>
<td>1000 lbs</td>
</tr>
</tbody>
</table>

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):

Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Pressure Hazard: No
Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):
None

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts Right to Know: Potassium hydroxide is listed on the Massachusetts Right to Know List.

Minnesota Hazardous Substance List: None of the components are listed on the Minnesota Hazardous Substance List.

New Jersey Right to Know: Potassium hydroxide is listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: Potassium hydroxide is listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: D2B - Toxic Material

SECTION 16: Other information, including date of preparation or last revision.

Revision Date: April 24, 2015

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.