SAFETY DATA SHEET
Cutting Fluid

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

1.1. Product identifier
Product name  Cutting Fluid
Product number  HDC-a, EHDC400, ZE

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses  Lubricant.
Uses advised against  No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet
Supplier  ELECTROLUBE. A division of HK WENTWORTH LTD
ASHBY PARK, COALFIELD WAY,
ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR
UNITED KINGDOM
+44 (0)1530 419600
+44 (0)1530 416640
info@hkw.co.uk

1.4. Emergency telephone number
Emergency telephone  +44 1865 407333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards  Aerosol 1 - H222, H229
Health hazards  Not Classified
Environmental hazards  Not Classified

2.2. Label elements
Pictogram

Signal word  Danger
Hazard statements  H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated
Cutting Fluid

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: —</td>
<td>EC number: 926-141-6</td>
</tr>
<tr>
<td>REACH registration number: 01-2119456620-43-XXXX</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>butane</th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 106-97-8</td>
<td>EC number: 203-448-7</td>
</tr>
</tbody>
</table>

| Classification | Flam. Gas 1 - H220 |

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Inhalation

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Ingestion

Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Skin contact

Rinse with water.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

Protection of first aiders

First aid personnel should wear appropriate protective equipment during any rescue.

4.2. Most important symptoms and effects, both acute and delayed
Cutting Fluid

General information
See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
Spray/mists may cause respiratory tract irritation.

Ingestion
Due to the physical nature of this product, it is unlikely that ingestion will occur.

Skin contact
Repeated exposure may cause skin dryness or cracking.

Eye contact
May be slightly irritating to eyes. May cause discomfort.

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

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Vapours may form explosive mixtures with air.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting
Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

6.2. Environmental precautions
Cutting Fluid

Environmental precautions

Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Approach the spillage from upwind. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Read and follow manufacturer’s recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep away from oxidising materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class

Chemical storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters
Cutting Fluid

**Occupational exposure limits**

**butane**

Long-term exposure limit (8-hour TWA): WEL 600 ppm  1450 mg/m³
Short-term exposure limit (15-minute): WEL 750 ppm  1810 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

**Protective equipment**

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

**Eye/face protection**

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

**Other skin and body protection**

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

**Hygiene measures**

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

**Respiratory protection**

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

**Environmental exposure controls**

Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties
Cutting Fluid

**Appearance**  
Aerosol.

**Colour**  
Colourless to pale yellow.

**Odour**  
Characteristic.

**Odour threshold**  
Not available.

**pH**  
Not available.

**Melting point**  
Not available.

**Initial boiling point and range**  
Not available.

**Flash point**  
< -40°C

**Evaporation rate**  
Not available.

**Evaporation factor**  
Not available.

**Flammability (solid, gas)**  
Not available.

**Upper/lower flammability or explosive limits**  
Not available.

**Other flammability**  
Not available.

**Vapour pressure**  
Not available.

**Vapour density**  
Not available.

**Relative density**  
Not available.

**Bulk density**  
Not available.

**Solubility(ies)**  
Not available.

**Partition coefficient**  
Not available.

**Auto-ignition temperature**  
Not available.

**Decomposition Temperature**  
Not available.

**Viscosity**  
Not available.

**Explosive properties**  
Not available.

**Oxidising properties**  
Not available.

**9.2. Other information**  
**Volatile organic compound**  
This product contains a maximum VOC content of 477 g/l.

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**  
**Reactivity**  
See the other subsections of this section for further details.

**10.2. Chemical stability**  
**Stability**  
Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

**10.3. Possibility of hazardous reactions**  
**Possibility of hazardous reactions**  
The following materials may react strongly with the product: Oxidising agents.

**10.4. Conditions to avoid**
Cutting Fluid

Conditions to avoid
Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated.

10.5. Incompatible materials

Materials to avoid
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral
Notes (oral LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
Based on available data the classification criteria are not met.

Skin corrosion/irritation
Animal data
Based on available data the classification criteria are not met.

Serious eye damage/irritation

Respiratory sensitisation

Skin sensitisation

Germ cell mutagenicity
Genotoxicity - in vitro
Based on available data the classification criteria are not met.

Carcinogenicity
Carcinogenicity
Based on available data the classification criteria are not met.

IARC carcinogenicity
None of the ingredients are listed or exempt.

Reproductive toxicity
Reproductive toxicity - fertility
Based on available data the classification criteria are not met.

Reproductive toxicity - development
Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure
STOT - single exposure
Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard
Aspiration hazard
Based on available data the classification criteria are not met.
Cutting Fluid

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
Spray/mists may cause respiratory tract irritation.

Ingestion
Due to the physical nature of this product, it is unlikely that ingestion will occur.

Skin contact
Repeated exposure may cause skin dryness or cracking.

Eye contact
May be slightly irritating to eyes. May cause discomfort.

Route of entry
Ingestion Inhalation Skin and/or eye contact

Target organs
No specific target organs known.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute toxicity - oral
Notes (oral LD₅₀)
LD₅₀ 15000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD₅₀)
LD₅₀ 3160 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
LC₅₀ 4951 mg/l, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation
Animal data
Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation
Serious eye damage/irritation
Dose: 0.1 mL, 1 second, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Skin sensitisation
Skin sensitisation
Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity
Genotoxicity - in vitro
Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo
Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity
Carcinogenicity
NOAEC 1100 mg/m³, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity
Reproductive toxicity - fertility
Fertility, One-generation study - NOAEL 750 mg/kg/day, Oral, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.
Cutting Fluid

Reproductive toxicity - development
Maternal toxicity: NOAEL: >5220 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure NOAEC >10400 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard
2.4 cSt @ 20°C Aspiration hazard if swallowed.

SECTION 12: Ecological Information

Ecotoxicity
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity
Toxicity Based on available data the classification criteria are not met.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics
Toxicity Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.

Acute toxicity - fish LL₅₀, 96 hours: >1000 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EL₅₀, 48 hours: >10000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EL₅₀, 72 hours: >1000 mg/l, Pseudokirchneriella subcapitata

Chronic toxicity - fish early life stage NOELR, 28 days: 0.173 mg/l, Onchorhynchus mykiss (Rainbow trout), Estimated value.

Chronic toxicity - aquatic invertebrates NOELR, 21 days: 1.22 mg/l, Daphnia magna, Estimated value.

12.2. Persistence and degradability
Persistence and degradability The degradability of the product is not known.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics
Persistence and degradability Readily biodegradable but failing the 10-day window.

Biodegradation Water - Degradation ~5%: 3 days
Water - Degradation 69%: 28 days

12.3. Bioaccumulative potential
Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics
Partition coefficient Scientifically unjustified.
12.4. Mobility in soil

The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

- **Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics**

12.5. Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information**

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods**

Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

### SECTION 14: Transport information

**General**

For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

#### 14.1. UN number

- **UN No. (ADR/RID)**: 1950
- **UN No. (IMDG)**: 1950
- **UN No. (ICAO)**: 1950
- **UN No. (ADN)**: 1950

#### 14.2. UN proper shipping name

- **Proper shipping name (ADR/RID)**: AEROSOLS
- **Proper shipping name (IMDG)**: AEROSOLS
- **Proper shipping name (ICAO)**: AEROSOLS
- **Proper shipping name (ADN)**: AEROSOLS
Cutting Fluid

14.3. Transport hazard class(es)
ADR/RID class 2.1
ADR/RID classification code 5F
ADR/RID label 2.1
IMDG class 2.1
ICAO class/division 2.1
ADN class 2.1

Transport labels

14.4. Packing group
ADR/RID packing group None
IMDG packing group None
ADN packing group None
ICAO packing group None

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-D, S-U
ADR transport category 2
Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

Inventories
EU - EINECS/ELINCS
None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms
Aerosol = Aerosol

Classification procedures according to Regulation (EC) 1272/2008

Training advice
Read and follow manufacturer's recommendations. Only trained personnel should use this material.

Issued by
Toni Ashford

Revision date
14/03/2017

Revision
0

SDS number
1204

Hazard statements in full
H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated
H304 May be fatal if swallowed and enters airways.
Cutting Fluid

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.