SAFETY DATA SHEET

CONTACT CLEANER LUBRICANT Aerosol

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

1.1. Product identifier

Product name CONTACT CLEANER LUBRICANT Aerosol

Product number EML-a, EEML200F, EEML400D, ZE

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

Identified uses Manufacture of electrical equipment

Uses advised against At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

1.3. Details of the supplier of the safety data sheet

Supplier

Manufacturer

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 (0)1530 419600 between 8.30am - 5.00pm Mon – Fri

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Aerosol 1 - H222, H229

Health hazards

STOT SE 3 - H336

Environmental hazards

Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC)

F+;R12. N;R51/53. R66,R67.

Physicochemical

Aerosol containers can explode when heated, due to excessive pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements

H229 Pressurised container: may burst if heated

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

H222 Extremely flammable aerosol.

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.

P271 Use only outdoors or in a well-ventilated area.

Supplemental label information

EUH066 Repeated exposure may cause skin dryness or cracking.

Supplementary precautionary statements

P261 Avoid breathing vapour/spray.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PENTANE **60-100%**

CAS number: 109-66-0 **EC number:** 203-692-4 **REACH registration number:** 01-2119459286-30

Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	F+;R12 Xn;R65 R66 R67 N;R51/53
Asp. Tox. 1 - H304	
STOT SE 3 - H336	
Aquatic Chronic 2 - H411	

PROPAN-2-OL **1-5%**

CAS number: 67-63-0 **EC number:** 200-661-7 **REACH registration number:** 01-2119457558-25-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	F;R11 Xi;R36 R67
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
STOT SE 3 - H336	

DIPHENYLAMINE **<1%**

CAS number: 122-39-4 **EC number:** 204-539-4

M factor (Acute) = 1 **M factor (Chronic) =** 1

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 3 - H301	T;R23/24/25 R33 N;R50/53
Acute Tox. 3 - H311	
Acute Tox. 3 - H331	
STOT RE 2 - H373	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

CONTACT CLEANER LUBRICANT Aerosol

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Move affected person to fresh air at once. Keep affected person warm and at rest. Get medical attention immediately. Get medical attention.

Ingestion

Rinse mouth thoroughly with water.

Skin contact

Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact

Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

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

Extinguish with the following media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Specific hazards

The product is flammable. Heating may generate flammable vapours. Containers can burst violently or explode when heated, due to excessive pressure build-up. Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting

Move containers from fire area if it can be done without risk.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Nettoyer les déversements immédiatement en respectant les mesures de précaution de la rubrique Équipement de protection.

6.2. Environmental precautions

Environmental precautions

Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Absorb in vermiculite, dry sand or earth and place into containers. Provide adequate ventilation.

6.4. Reference to other sections

Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health

hazards. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. 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

Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store at moderate temperatures in dry, well ventilated area.

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

Occupational exposure limits

PENTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1800 mg/m3
Short-term exposure limit (15-minute): WEL

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m3
Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m3

DIPHENYLAMINE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m3
Short-term exposure limit (15-minute): WEL 20 mg/m3

WEL = Workplace Exposure Limit

Ingredient comments

Australian exposure limits are: LT= ES-TWA and ST= ES STEL

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PENTANE (CAS: 109-66-0)

DNEL	Industry - Dermal; Long term systemic effects: 432 mg/kg/day Industry - Inhalation; Long term systemic effects: 3000 mg/m3 Consumer - Oral; Long term systemic effects: 214 mg/kg/day Consumer - Dermal; Long term systemic effects: 214 mg/kg/day Consumer - Inhalation; Long term systemic effects: 643 mg/m3
PNEC	- water; 0.23 mg/l - Sediment; 1.2 mg/kg - Soil; 0.55 mg/kg - STP; 3.6 mg/l

PROPAN-2-OL (CAS: 67-63-0)

DNEL	Industry - Dermal; : 888 mg/kg/day Industry - Inhalation; : 500 mg/m3 Consumer - Dermal; : 319 mg/kg/day Consumer - Inhalation; : 89 mg/m3 Consumer - Oral; : 26 mg/kg/day
PNEC	- Fresh water; 140.9 mg/l - Marine water; 140.9 mg/l - Sediment; 552 mg/kg - Soil; 28 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. EN166

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. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). Gloves should conform to EN374

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. Do not smoke in work area.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. It is recommended to use respiratory equipment with combination filter, type A2/P2. EN14387

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Aerosol. Liquid.

Colour

Colourless.

Odour

Characteristic.

CONTACT CLEANER LUBRICANT Aerosol

Melting point

-130°C/-202°F

Initial boiling point and range

36°C/96.8°F @

Flash point

-48°C/-54.4°F CC (Closed cup).

Upper/lower flammability or explosive limits

: 1.4

Vapour pressure

5.33 kPa @ 20°C/68°F

Relative density

0.650 @ 20°C/68°F

Bulk density

650 kg/m³

Solubility(ies)

Immiscible with water.

Auto-ignition temperature

309°C/588.2°F

Comments

Information given is applicable to the major ingredient.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability

Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Not available. Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid

Strong alkalis. Strong acids.

10.6. Hazardous decomposition products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects

No information available.

Other health effects

There is no evidence that the product can cause cancer.

Inhalation

May cause respiratory system irritation. Vapours may cause headache, fatigue, dizziness and nausea. Gas or vapour in high

concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.

Skin contact

Product has a defatting effect on skin. Prolonged contact may cause dryness of the skin. Prolonged or repeated exposure may cause severe irritation.

Eye contact

Irritating to eyes.

Route of entry

Inhalation

Toxicological information on ingredients.

PENTANE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)

2,000

CONTACT CLEANER LUBRICANT Aerosol

PROPAN-2-OL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)

4,700.0

Species

Rat

ATE oral (mg/kg)

4,700.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)

12800

Species

Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)

46.5

Species

Rat

ATE inhalation (vapours mg/l)

46.5

Inhalation

Vapours may cause headache, fatigue, dizziness and nausea.

Eye contact

Irritating to eyes.

Acute and chronic health hazards

Irritation of eyes and mucous membranes. Narcotic effect. Central nervous system depression.

Route of entry

Skin and/or eye contact Skin absorption Ingestion

Target organs

Central nervous system Eyes Skin Respiratory system, lungs

Medical symptoms

Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). General respiratory distress, unproductive cough. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

Benzamine, N phenyl, reaction product with 2,4,4 trimethylpentene

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)

2,000

Species

Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)

2000

Species

Rat

SECTION 12: Ecological Information

Ecotoxicity

Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Ecological information on ingredients.

PROPAN-2-OL

Acute toxicity - fish

LC50, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: 13299 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC_{50}, 72 hours: > 1.000 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms

EC_{50}, >: > 1.000 mg/l, Activated sludge

Benzamine, N phenyl, reaction product with 2,4,4 trimethylpentene

Acute toxicity - fish

LC50, 96 hours: > 71 mg/l, Brachydanio rerio (Zebra Fish) LC_{50}, 96 hours: mg/l, Fish

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: 51 mg/l, Daphnia magna EC_{50}, 48 hours: mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC_{50}, 72 hours: > 100 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability

There are no data on the degradability of this product.

Ecological information on ingredients.

PROPAN-2-OL

Persistence and degradability

The product is readily biodegradable.

Benzamine, N phenyl, reaction product with 2,4,4 trimethylpentene

Persistence and degradability

The product is not biodegradable.

12.3. Bioaccumulative potential

No data available on bioaccumulation.

Ecological information on ingredients.

PROPAN-2-OL

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

PROPAN-2-OL

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

12.6. Other adverse effects

CONTACT CLEANER LUBRICANT Aerosol

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods

Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1litre packed in cartons of less than 30kg gross weight to be exempt from control providing they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed must show the following.

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS (PENTANE)

Proper shipping name (IMDG) AEROSOLS (PENTANE)

Proper shipping name (ICAO) AEROSOLS (PENTANE)

Proper shipping name (ADN) AEROSOLS (PENTANE)

Proper Shipping Name (DOT)

14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID subsidiary risk

ADR/RID label 2.1

IMDG class 2.1

IMDG subsidiary risk

ICAO class/division 2.1

ICAO subsidiary risk

Transport labels

14.4. Packing group

Not applicable.

ADR/RID packing group

IMDG packing group

ICAO packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

CONTACT CLEANER LUBRICANT Aerosol

Yes.

14.6. Special precautions for user

EmS F-D, S-U

Emergency Action Code

Hazard Identification Number (ADR/RID)

Tunnel restriction code (D)

Markings

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

National regulations

Control of Substances Hazardous to Health Regulations 2002 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions on use are known for this product.

Water hazard classification

WGK 2

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Risk phrases in full

CONTACT CLEANER LUBRICANT Aerosol

R11 Highly flammable.

R12 Extremely flammable.

R36 Irritating to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated