

SAFETY DATA SHEET

ELECTRONIC CLEANING SOLVENT PLUS (COMBI)

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

1.1. Product identifier

Product name ELECTRONIC CLEANING SOLVENT PLUS (COMBI)
Product number ECSP-db,EECSP200DB,ZE

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

Identified uses Cleaning agent.
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
 info@hkw.co.uk
 +44 (0)1530 419600
 +44 (0)1530 416640

1.4. Emergency telephone number

Emergency telephone +44 (0)1530 419600 between 8.30am - 5.00pm GMT 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.

Environmental Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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



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Signal word	Danger
Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	PENTANE, PROPAN-2-OL
Supplementary precautionary statements	P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. 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 product does not contain any substances classified as PBT or vPvB.

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 Flam. Liq. 2 - H225 Asp. Tox. 1 - H304 STOT SE 3 - H336 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) F+;R12 Xn;R65 R66 R67 N;R51/53	
PROPAN-2-OL		1-5%
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25-XXXX
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC or 1999/45/EC) F;R11 Xi;R36 R67	

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.

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.

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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 Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

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 Wear protective clothing as described in Section 8 of this safety data sheet.

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.

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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

WEL = Workplace Exposure Limit

PENTANE (CAS: 109-66-0)

DNEL	Industry - Dermal; Long term systemic effects: 432 mg/kg/day Industry - Inhalation; Long term systemic effects: 3000 mg/m ³ 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/m ³
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/m ³ Consumer - Dermal; : 319 mg/kg/day Consumer - Inhalation; : 89 mg/m ³ 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. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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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). To protect hands from chemicals, gloves should comply with European Standard 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. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P2. Gas and combination filter cartridges should comply with European Standard EN14387.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol. Liquid.
Colour	Colourless.
Odour	Characteristic.
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/m ³
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

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not available. Will not polymerise.
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10.4. Conditions to avoid

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

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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 (LD₅₀ mg/kg) 2,000.0

PROPAN-2-OL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 4,700.0

Species Rat

ATE oral (mg/kg) 4,700.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 12,800.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 46.5

Species Rat

ATE inhalation (vapours mg/l) 46.5

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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.

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, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours, 48 hours: 13299 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours, 72 hours: > 1.000 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC ₅₀ , >: > 1.000 mg/l, Activated sludge

12.2. Persistence and degradability

Ecological information on ingredients.

PROPAN-2-OL

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Ecological information on ingredients.

PROPAN-2-OL

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

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

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

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Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

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

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)

14.3. Transport hazard class(es)

ADR/RID class	2
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1

Transport labels



14.4. Packing group

ADR/RID packing group	N/A
IMDG packing group	N/A
ICAO packing group	N/A

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

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EmS

F-D, S-U

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (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	Workplace Exposure Limits EH40.
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.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by	Toni Ashford
Revision date	06/10/2015
Revision	7
SDS number	10355
Risk phrases in full	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.

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Hazard statements in full

H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: may burst if heated
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.

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.