



1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: PROTEAN ELECTRICAL CLEANER

Article number: F406

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

Use of substance / mixture: PC35: Washing and cleaning products (including solvent based products).

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: TYGRIS Industrial
Unit 31
Kyle Road Industrial Estate
Irvine
Ayrshire
KA12 8LE
Tel +44 (0) 1294 311 066
Fax +44 (0) 1294 277 115
Email technical@tygrisindustrial.com

Further information
obtainable from: Technical Department

1.4 Emergency telephone
number: Tel +44 (0) 1294 311 066



2. Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Irrit. 2: H319; Flam. Aerosol 1: H222; Skin Irrit. 2: H315; STOT SE 3: H336; -: H229

Most important adverse effects: Extremely flammable aerosol. Pressurised container: May burst if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard statements: H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS02: Flame
GHS07: Exclamation mark
GHS09: Environmental



Signal word: Danger

Precautionary statements: P102: Keep out of reach of children.
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.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50°C.

2.3. Other hazards

Other hazards: In use, may form flammable / explosive vapour-air mixture.

PBT: This product is not identified as a PBT/vPvB substance.



3. Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

PROPAN-2-OL

EINECS	CAS	PBT / WEL	CLP Classification	Percent
200-661-7	67-63-0	-	Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336	30-50%

HEPTANE - REACH registered number(s): 01-2119475515-33-XXXX

205-563-8	142-82-5	-	Flam. Liq. 2: H225; Asp. Tox. 1: H304; Skin Irrit. 2: H315; STOT SE 3: H336; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	30-50%
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METHANOL

200-659-6	67-56-1	-	Flam. Liq. 2: H225; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370	<1%
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4. First aid measures

4.1. Description of first aid measures

Skin contact:	Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.
Eye contact:	Bathe the eye with running water for 15 minutes. Consult a doctor.
Ingestion:	Do not induce vomiting. Consult a doctor.
Inhalation:	Move to fresh air in case of accidental inhalation of vapours.

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

Skin contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.
Inhalation:	No data available.
Delayed / immediate effects:	No data available.

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

Immediate / special treatment:	Not applicable.
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5. Firefighting measures

5.1 Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Extremely flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Eliminate all sources of ignition. If outside do not approach from downwind.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Do not use equipment in clean-up procedure which may produce sparks. Clean-up should be dealt with only by qualified personnel familiar with the specific substance.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

7. Handling and storage

7.1 Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Smoking is forbidden. Use non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Keep away from direct sunlight. Keep away from sources of ignition.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.



8. Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

PROPAN-2-OL

Workplace exposure limits:

Respirable dust:

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	999 mg/m ³	1250 mg/m ³	-	-

HEPTANE

UK	2100 mg/m ³	8400 mg/m ³	-	-
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METHANOL

UK	266 mg/m ³	333 mg/m ³	-	-
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DNEL/PNEC Values

Hazardous ingredients:

HEPTANE

Type	Exposure	Value	Population	Effect
DNEL	Dermal	300mg/kg/day	Workers	Systemic
DNEL	Inhalation	2085mg/m ³	Workers	Systemic
DNEL	Dermal	149mg/kg/day	Consumers	Systemic
DNEL	Inhalation	447mg/m ³	Consumers	Systemic
DNEL	Oral	149mg/kg/day	Consumers	Systemic

8.2. Exposure controls

Engineering measures:

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Respiratory equipment:

Respiratory protection not required.

Hand protection:

Chemically resistant gloves.

Eye protection:

Safety glasses. Ensure eye bath is to hand.

Skin protection:

Protective clothing.

Environmental:

Prevent from entering in public sewers or the immediate environment.



9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Aerosol
Colour:	Colourless
Odour:	Characteristic odour
Solubility in water:	Soluble
Also soluble in:	Most organic solvents
Flash point°C:	-60
Relative density:	0.75

9.2. Other information

Other information:	No data available.
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10. Stability and reactivity

10.1. Reactivity

Reactivity:	Stable under recommended transport or storage conditions.
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10.2. Chemical stability

Chemical stability:	Stable under normal conditions. Stable at room temperature.
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10.3. Possibility of hazardous reactions

Hazardous reactions:	Hazardous reactions will not occur under normal transport or storage conditions.
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10.4. Conditions to avoid

Conditions to avoid:	Direct sunlight. Heat. Hot surfaces. Sources of ignition. Flames.
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10.5. Incompatible materials

Materials to avoid:	Strong oxidising agents. Strong acids.
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10.6. Hazardous decomposition products

Haz. decomp. products:	In combustion emits toxic fumes.
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11. Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

PROPAN-2-OL

IVN	RAT	LD50	1088	mg/kg
ORL	MUS	LD50	3600	mg/kg
ORL	RAT	LD50	5045	mg/kg
SCU	MUS	LDLO	6	gm/kg

HEPTANE

DERMAL	RBT	LD50	>2000	mg/kg
ORAL	RAT	LD50	>5000	mg/kg
VAPOURS	RAT	4H LC50	>20	mg/l

METHANOL

IVN	RAT	LD50	2131	mg/kg
ORL	MUS	LD50	7300	mg/kg
ORL	RAT	LD50	5628	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	-	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects: No data available.

Other information: Not applicable.



12. Ecological information

12.1. Toxicity

Hazardous ingredients:

HEPTANE

Daphnia magna	48H EC50	<10	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	<10	mg/l

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

13. Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Not applicable.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.



14. Transport information

14.1. UN number

UN number: UN1950

14.2. UN proper shipping name

Shipping name: AEROSOLS

14.3. Transport hazard class(es)

Transport class: 2

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: D

Transport category: 2

15. Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical safety assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.



16. Other information

Other information:	This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.
Phrases used in s.2 and s.3:	H222: Extremely flammable aerosol. H225: Highly flammable liquid and vapour. H229: Pressurised container: May burst if heated H301: Toxic if swallowed. H304: May be fatal if swallowed and enters airways. H311: Toxic in contact with skin. H315: Causes skin irritation. H319: Causes serious eye irritation. H331: Toxic if inhaled. H336: May cause drowsiness or dizziness. H370: Causes damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.
Legal disclaimer:	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.