

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product name TYGRIS ELECTRICAL CLEANER

Product number R235

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

Identified uses Cleaning agent.

Uses advised against Use only for intended applications.
Do not use on live or energised equipment

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

1.4. Emergency telephone number

SECTION 2: Hazards identification

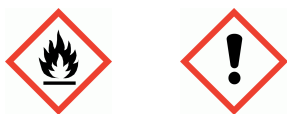
2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

| | |
|-----------------------|--------------------------------------|
| Physical hazards | Aerosol 1 - H222, H229 |
| Health hazards | Eye Irrit. 2 - H319 STOT SE 3 - H336 |
| Environmental hazards | Not Classified |

2.2. Label elements

Hazard pictograms



| | |
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| Signal word | Danger |
| Hazard statements | H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. |
| Precautionary statements | P102 Keep out of reach of children. P261 Avoid breathing vapour/ spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with local regulations. |
| Contains | Propan-2-ol |
| Detergent labelling | 15 - < 30% aliphatic hydrocarbons |
| Supplementary 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. P264 Wash contaminated skin thoroughly after handling. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/doctor if you feel unwell. 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

| | | |
|---|----------------------|---|
| Propan-2-ol CAS number: 67-63-0 | EC number: 200-661-7 | 60 - 100% REACH registration number: 01-2119457558-25-XXXX |
| Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336 | | |
| Petroleum gases, liquefied CAS number: 68476-85-7 | EC number: 270-704-2 | 10 - <30% |
| Classification Flam. Gas 1A - H220 Press. Gas (Liq.) - H280 | | |

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

SECTION 4: First aid measures
4.1. Description of first aid measures

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|-----------------------------------|---|
| General information | If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel. |
| Inhalation | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist. Place unconscious person on their side in the recovery position and ensure breathing can take place. |
| Ingestion | Rinse mouth thoroughly with water. If in doubt, get medical attention promptly. Due to the small packaging, the risk of ingestion is minimal. Do not induce vomiting unless under the direction of medical personnel. |
| Skin contact | Remove contamination with soap and water or recognised skin cleansing agent. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues. |
| 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

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

| | |
|----------------------------|---|
| 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. Repeated |
| Skin contact | exposure may cause skin dryness or cracking. |
| Eye contact | Vapour or spray in the eyes may cause irritation and smarting. Particles in the eyes may cause irritation and smarting. |

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

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|----------------------------|------------------------|
| Specific treatments | Treat symptomatically. |
|----------------------------|------------------------|

SECTION 5: Firefighting measures
5.1. Extinguishing media

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| Suitable extinguishing media | The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. |
| 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

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| 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: Toxic gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO ₂). |

5.3. Advice for firefighters

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|--|---|
| 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 Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Take precautionary measures against static discharges.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Not considered to be a significant hazard due to the small quantities used.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up 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. 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. Provide adequate ventilation. 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. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

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. The product is flammable. Avoid exposing aerosol containers to high temperatures or direct sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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. Do not expose to temperatures exceeding 50°C/122°F. Avoid inhalation of vapours and spray/mists. Avoid contact with eyes.

Advice on general occupational hygiene

Good personal hygiene procedures should be implemented. Wash contaminated skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Wash after use and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep away from oxidising materials, heat and flames. Store in a cool and well-ventilated place. Protect from sunlight. Keep containers upright. Protect containers from damage. Do not expose to temperatures exceeding 50°C/122°F. Do not store near heat sources or expose to high temperatures. Store in accordance with national regulations.

Storage class Chemical storage. Aerosol containers and lighters

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
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

Petroleum gases, liquefied

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

WEL = Workplace Exposure Limit.

Propan-2-ol (CAS: 67-63-0)
DNEL

Workers - Inhalation; Long term systemic effects: 500 mg/m³

Workers - Dermal; Long term systemic effects: 888 mg/kg/day

General population - Inhalation; Long term systemic effects: 89 mg/m³

General population - Dermal; Long term systemic effects: 319 mg/kg/day

General population - Oral; Long term systemic effects: 26 mg/kg/day

PNEC

- Fresh water; 140.9 mg/l

- marine water; 140.9 mg/l

- STP; 2251 mg/l

- Sediment (Freshwater); 552 mg/kg

- Sediment (Marinewater); 552 mg/kg

- Soil; 28 mg/kg

- Oral; 160 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. 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. 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

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Respiratory protection

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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| Appearance | Aerosol. |
| Colour | Clear. |
| Odour | Organic solvents. |
| Initial boiling point and range | -40 - -2°C (LPG) |
| Flash point | -104°C (LPG) |
| Upper/lower flammability or explosive limits | 1.4 - 10.9%(V)(LPG) |
| Auto-ignition temperature | 365 °C / 689 °F (LPG) |

9.2. Other information

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

Conditions to avoid Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated Avoid heat, flames and other sources of ignition. Avoid the following conditions: Freezing.

10.5. Incompatible materials

Materials to avoid No specific requirements are anticipated under normal conditions of use.

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**

Inhalation Gas or vapour may irritate the respiratory system. May cause nausea, headache, dizziness and intoxication. Vapour may irritate respiratory system/lungs.

Ingestion Due to the physical nature of this product, it is unlikely that ingestion will occur. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract. May cause chemical burns in mouth, oesophagus and stomach. May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact May cause eye irritation. May cause serious eye damage.

Route of exposure Inhalation Ingestion Skin and/or eye contact

SECTION 12: Ecological information
12.1. Toxicity

Toxicity The product is not believed to present a hazard due to its physical nature.

12.2. Persistence and degradability

Persistence and degradability Volatile substances are degraded in the atmosphere within a few days. The other substances in the product are expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product. Exposure to aquatic environment unlikely.

12.4. Mobility in soil

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

12.5. Results of PBT and vPvB assessment

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

Other adverse effects The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations
13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Dispose of waste product or used containers in accordance with local regulations

Disposal methods Do not empty into drains. 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.

Waste class The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

14.1. UN number

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

4.2. 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

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 |
| ICAO packing group | None |
| ADN packing group | None |

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

| | |
|-------------------------|----------|
| 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****National regulations**

Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.
The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

EU legislation

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).
Commission Regulation (EU) No 2015/830 of 28 May 2015.
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).
Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended).

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.
 ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
 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

Key literature references and sources for data

Source: European Chemicals Agency, <http://echa.europa.eu/>

Classification procedures according to Regulation (EC) 1272/2008

Aerosol 1 - H222, H229: : Expert judgement.

Revision date

26/11/2020

Revision

1

SDS number

8043

Hazard statements in full

H220 Extremely flammable gas.
 H222 Extremely flammable aerosol.
 H225 Highly flammable liquid and vapour.
 H229 Pressurised container: may burst if heated.
 H280 Contains gas under pressure; may explode if heated.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

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.