

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

1.1 Product identifier

Trade name: ELECTRICAL DEGREASER

Article number: TB6305

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

Use of substance / mixture: Electrical Degreaser

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: TYGRIS Industrial
Unit 31
Kyle Road Industrial Estate
Irvine
Ayshire
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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Physical hazards: Flam. Liq. 2 - H225
Health hazards: Eye Irrit. 2 - H319, STOT SE 3 - H336

2.2. Label elements

Hazard statements: H225: Highly flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.

Hazard pictograms: GHS02: Flame
GHS07: Exclamation mark



Signal word: Danger

Precautionary statements: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P337+P313: If eye irritation persists: Get medical advice/ attention.
P403+P235: Store in a well-ventilated place. Keep cool.

Supplementary precautionary statements: P240: Ground/ bond container and receiving equipment.
P241: Use explosion-proof electrical equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing vapour/ spray.
P264: Wash contaminated skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 +P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378: In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P314: Get medical advice/ attention if you feel unwell.
P403+P233: Store in a well-ventilated place. Keep container tightly closed. P405: Store locked up.
P501: Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name:	Isopropanol
EU index number:	603-117-00-0
CAS number:	67-63-0
EC number:	200-661-7

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:	CAUTION! First aid personnel must be aware of own risk during rescue! Remove affected person from source of contamination. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Get medical attention immediately.
Skin contact:	Remove affected person from source of contamination. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.
Eye contact:	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.
Ingestion:	Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.
Inhalation:	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.

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

Skin contact:	There may be irritation and redness at the site of contact. An itchy rash may occur at the site of contact.
Eye contact:	There may be pain and redness.
Ingestion:	Overexposure may cause the following adverse effects: Unconsciousness. Nausea, vomiting.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest. May cause an asthma-like shortness of breath.

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

Notes for the doctor:	If exposed or concerned get medical advice/attention.
Specific treatments:	Eye bathing equipment should be available on the premises.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemicals, sand, dolomite etc.

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:

May explode when heated or when exposed to flames or sparks. Thermal decomposition or combustion products may include the following substances: Very toxic or corrosive gases or vapours. May form explosive or toxic mixtures with air. May explode when heated or when exposed to flames or sparks. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapour explosion and poison hazard indoors, outdoors and in sewers.

5.3. Advice for fire-fighters

Protective actions during firefighting:

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. Cool containers exposed to flames with water until well after the fire is out. Move containers from fire area if it can be done without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Use water spray to reduce vapours. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:	Evacuate area. Shut off all sources of ignition.
For non-emergency personnel:	Follow instructions given by emergency personnel.
For emergency responders:	Refer to this MSDS.

6.2. Environmental precautions

Environmental precautions:	Do not discharge into drains or watercourses or onto the ground. Contain the spillage using bunding. Avoid release to the environment. Alert the neighbourhood to the presence of fumes or gas.
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6.3. Methods and material for containment and cleaning up

Clean-up procedures:	Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted. Absorb small quantities with paper towels and evaporate in a safe place. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.
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6.4. Reference to other sections

Reference to other sections:	For personal protection, see Section 8.
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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Usage precautions:	Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Avoid contact with the following materials: Acids. Moisture. Read and follow manufacturer's recommendations. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist.
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Advice on general occupational hygiene:	Take off contaminated clothing and wash it before re-use.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions:	Keep away from oxidising materials, heat and flames. May attack some plastics, rubber and coatings. Store in tightly-closed, original container in a dry, cool and well-ventilated place.
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Storage class:	Flammable liquid storage.
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7.3. Specific end use(s)

Specific end use(s):	Electrical Degreaser
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

Long-term exposure limit (8-hour TWA)	Short-term exposure limit (15-minute)
WEL 400 ppm, 999 mg/m ³	WEL 500 ppm, 1250 mg/m ³

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2. Exposure controls

Protective equipment:



Engineering measures:

Provide adequate general and local exhaust ventilation. Work in fume cupboard.

Respiratory equipment:

Wear a full facepiece respirator fitted with the following cartridge: Organic vapour filter.

Hand protection:

Wear protective gloves made of the following material: Neoprene. Nitrile rubber.

Eye/face protection:

Wear chemical splash goggles.

Other skin and body protection:

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of skin contact. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures:

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated. Contaminated clothing should be placed in a closed container for disposal or decontamination. Warn cleaning personnel of any hazardous properties of the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Colourless
Odour:	Alcoholic
Melting point:	-89°C
Initial boiling point and range:	82°C @
Flash point:	12°C CC (Closed cup)
Evaporation rate:	2.83 (ethanol = 1)
Upper/lower flammability or explosive limits:	Upper flammable/explosive limit: 12.7 Lower flammable/explosive limit: 2.
Vapour pressure:	44 mm Hg @ °C
Vapour density:	2.1
Relative density:	0.79 @ °C
Solubility(ies):	Miscible with water. Miscible with the following materials: Alcohols. Ether.
Auto-ignition temperature:	399°C
Viscosity:	2.8 cP @ 20°C
Explosive under the influence of a flame:	Not considered to be explosive.
Oxidising properties:	There are no chemical groups present in the product that are associated with oxidising properties.

9.2. Other information

Refractive index:	1.37
Molecular weight:	60.1
Volatility:	100

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Hazardous reactions: Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid: Avoid contact with strong oxidising agents. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Symptoms / routes of exposure

Skin contact: Contains components which may penetrate the skin. Prolonged contact may cause redness, irritation and dry skin.

Eye contact: Irritation of eyes and mucous membranes.

Ingestion: Swallowing concentrated chemical may cause severe internal injury.

Inhalation: Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Acute and chronic health hazards:

Exposure; This chemical has good warning properties. Gas or vapour is harmful on prolonged exposure or in high concentrations. Symptoms following overexposure may include the following: Irritation of eyes and mucous membranes. Toxic through skin absorption (percutaneous). Narcotic effect. A single exposure may cause the following adverse effects: Central nervous system depression. May cause chemical eye burns. Swallowing concentrated chemical may cause severe internal injury. Unconsciousness. Death.

Aspiration hazard: Not anticipated to present an aspiration hazard, based on chemical structure.

Route of entry: Inhalation Ingestion. Skin and/or eye contact.

Target organs: Central nervous system Eyes Respiratory system, lungs Skin

Medical symptoms: Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. May cause suffocation. Skin irritation. Nausea, vomiting. Unconsciousness, possibly death. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Behavioural changes. Hypotension (low blood pressure). Dizziness.

Medical considerations: Convulsions. Central nervous system depression.

SECTION 12: Ecological information

12.1. Toxicity Hazardous

ingredients:

Toxicity	LOW
Acute toxicity - fish	LC50, 96 hours: >100 mg/l, Algae

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: Highly volatile.

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information: If this product becomes waste it is to be treated as hazardous waste. Any other constituents or contaminants in the waste stream must be taken into account when classifying the waste. In the EU, the European Waste Catalogue Code to be assigned is dependant on the processes giving rise to the waste. In the absence of any such processes having taken place EWC 140603* (other solvents and solvent mixtures) may be used. Hazardous waste must be suitably contained, stored, packaged and transported, see section 7 and 4 for such details. In the UK only waste carriers registered with the Environment Agency may transport waste.

Disposal methods: Waste and residues must be disposed of in accordance with national regulatory requirements.

SECTION 14: Transport information

UN Number (ADR/RID): 1219
 UN Number (IMDG): 1219
 UN Number (ICAO): 1219
 UN Number (ADN): 1219

14.2 UN proper shipping name

Proper shipping name (ADR/RID): ISOPROPANOL (ISOPROPYL ALCOHOL)
 Proper shipping name (IMDG): ISOPROPANOL (ISOPROPYL ALCOHOL)
 Proper shipping name (ICAO): ISOPROPANOL (ISOPROPYL ALCOHOL)
 Proper shipping name (ADN): ISOPROPANOL (ISOPROPYL ALCOHOL)

14.3. Transport hazard class(es)

ADR/RID class: 3
 ADR/RID classification code: F1
 ADR/RID label: 3
 IMDG class: 3
 ICAO class/division: 3
 ADN class: 3

Transport labels:



14.4. Packing group ADR/

RID packing group: II
 IMDG packing group: II
 ADN packing group: II
 ICAO packing group: II

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for user

EmS: F- E, S-D
 ADR transport category: 2
 Emergency Action Code: +2YE
 Hazard Identification Number (ADR/RID): 33
 Tunnel restriction code: (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

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

National regulations: Classification, Packaging and Labelling Regulations 1984.
Highly Flammable Liquid Regulations 1972.
Health and Safety at Work etc. Act 1974 (as amended).
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677)
(as amended).

15.2. Chemical safety assessment

SECTION 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: H225: Highly flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.

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.