

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

1.1 Product identifier

Trade name: BRAKE & CLUTCH CLEANER

Article number: TB6005

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

Use of substance / mixture: Brake & Clutch Cleaner

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

Physical hazards:	Flam. Liq. 2 - H225
Health hazards:	Skin Irrit. 2 - H315, Muta. 1B - H340, Carc. 1B - H350, Asp. Tox. 1 - H304
Environment hazards:	Aquatic Chronic 2 - H411

2.2. Label elements

Hazard statements:	H225: Highly flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H340: May cause genetic defects. H350: May cause cancer. H411: Toxic to aquatic life with long lasting effects.
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Hazard pictograms:	GHS02: Flame GHS07: Exclamation mark GHS09: Environmental GHS08: Health hazard
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Signal word:	Danger
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Precautionary statements:	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273: Avoid release to the environment. P308+P313: IF exposed or concerned: Get medical advice/ attention. P331: Do NOT induce vomiting. P362+P364: Take off contaminated clothing and wash it before reuse.
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Supplementary precautionary statements:	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P233: Keep container tightly closed. 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. P264: Wash contaminated skin thoroughly after handling. P280: Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352: IF ON SKIN: Wash with plenty of water. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P332+P313: If skin irritation occurs: Get medical advice/ attention. P370+P378: In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P391: Collect spillage. P301: IF SWALLOWED: P313: Get medical advice/ attention. P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents/ container in accordance with national regulations.
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Additional information:	Contains Odourless degreaser
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2.3. Other hazards

PBT:	This product is not identified as a PBT/vPvB substance.
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3. Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ODOURLESS DEGREASER

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	64742-49-0	-	Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Muta. 1B - H340 Carc. 1B - H350 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	<90%

PROPAN-2-OL - REACH registered number(s): 01-2119457558-25-XXXX

200-661-7	67-63-0	-	Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	<5%
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The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

4. First aid measures

4.1. Description of first aid measures

Skin contact:	Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash skin thoroughly with soap and water. If irritation occurs get medical advice/attention.
Eye contact:	If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Transfer to hospital for specialist examination.
Ingestion:	Do not induce vomiting. If conscious give 500ml of water to drink immediately. wash out mouth with water. Consult a doctor.
Inhalation:	Remove casualty from exposure ensuring one's own safety whilst doing so. If inhaled remove person to fresh air and keep comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention.

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.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use alcohol-resistant foam, carbon dioxide or dry powder to extinguish.

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: Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Forms explosive mixtures with air.

Hazardous combustion products: Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

5.3. Advice for fire-fighters

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

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid. Take precautionary measures against static discharge.

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.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Use only non-sparking tools.

6.4. Reference to other sections

Reference to other sections: For personal protection, see Section 8.

7. Handling and storage

7.1 Precautions for safe handling

Usage precautions: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation of mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting. Do not breathe mist/vapours/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Use only non-sparking tools. Do not eat, drink or smoke when using this product.

Advice on general occupational hygiene: Take off contaminated clothing and wash it before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions: Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class: Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s): Brake & Clutch Cleaner

8. Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

PROPAN-2-OL

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

Engineering measures: Ensure there is sufficient ventilation of the area. Use explosion-proof electrical/ventilating/lighting. Take precautionary measures against static discharge.

Respiratory equipment: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Wear protective gloves.

Eye/face protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Wear protective clothing. Take precautionary measures against static discharge.

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

Appearance:	Colourless liquid
Odour:	Unpleasant
Initial boiling point and range:	71 - 95°C
Flash point:	< 21°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

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 at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Hazardous reactions:	Under normal conditions of storage and use, no hazardous reactions will occur. Decomposition may occur on exposure to conditions or materials listed below.
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10.4. Conditions to avoid

Conditions to avoid:	Keep away from heat, sparks and open flame.
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10.5. Incompatible materials

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

Haz. decomp. products:	In combustion emits toxic fumes. Carbon dioxide (CO ₂). Carbon monoxide (CO).
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11. Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

PROPAN-2-OL

Other health effects:	Consolidated carcinogen list.
Inhalation:	Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion:	Swallowing concentrated chemical may cause severe internal injury.
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.
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.
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.

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	-	Hazardous: calculated

Symptoms / routes of exposure

Skin contact:	There may be irritation or 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.
Aspiration hazard:	Aspiration hazard if swallowed.

12. Ecological information

12.1. Toxicity

Hazardous ingredients:

PROPAN-2-OL

Toxicity	LOW
Acute toxicity - fish	LC ₅₀ , 96 hours: >100 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability: No data available.
PROPAN-2-OL
Significant compartments likely to be:~ water rapid. Air rapid Photo oxidation.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.
PROPAN-2-OL
Low on the basis of log kow.

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

Other adverse effects: Dangerous for the environment.

13. Disposal considerations

13.1. Waste treatment methods

General information: Avoid release to the environment.

Disposal methods: Transfer to a suitable container and arrange for collection by specialised disposal company. NB the user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport information

UN Number (ADR/RID): 1993

UN Number (IMDG): 1993

UN Number (ICAO): 1993

UN Number (ADN): 1993

14.2 UN proper shipping name

Proper shipping name (ADR/RID): FLAMMABLE LIQUID, N.O.S.

Proper shipping name (IMDG): FLAMMABLE LIQUID, N.O.S.

Proper shipping name (ICAO): FLAMMABLE LIQUID, N.O.S.

Proper shipping name (ADN): FLAMMABLE LIQUID, N.O.S.

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:



14.6 Special precautions for user**EmS:** F-E, S-E**ADR transport category:** 2**Emergency Action Code:** •3YE**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****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 REACH chemical safety assessment has been carried out on the REACH
registered products showing in section 3 of SDS.**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.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H340: May cause genetic defects.
H350: May cause cancer.
H411: 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.