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

1.1 Product identifier

Trade name: **BRAKE CLEANER 5ltr**

Article number: **TB6005**

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

Use of substance / mixture: Solvent Cleaner

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

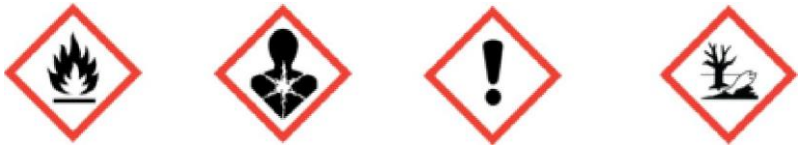
2.1 Classification of the substance or mixture
According to GB Classification, Labelling and Packaging of Substances and Mixtures Regulation (CLP):

Physical and Chemical	Flam. Liq.2; H225
Hazards Human health	Asp. Tox.1; H304; Skin Irrit.2; H315; STOT SE3; H336
Environment	Aquatic Chronic 2; H411

2.2 Label elements
Labelling according to GB CLP:
Signal word: Danger

Contains: Hydrocarbons, C6, isoalkanes, <5% n-Hexane;
Hydrocarbons, C7, n-Alkanes, Isoalkanes, Cyclics

Hazard Pictogram(s):



Hazard Statements:

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
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.
	P261	Avoid breathing vapours.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P273	Avoid release to the environment.
	P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
	P331	Do NOT induce vomiting.
	P302+P352	IF ON SKIN: Wash with plenty of water.
	P332+P313	If skin irritation occurs: Get medical advice/attention.
	P501	Dispose of contents/container in accordance with local/national regulations.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

Hazardous components

Chemical Name	CAS No./ EC No./ Reg. No	Classification (CLP)	Content
HYDROCARBONS, C6, ISOALKANES, <5% n- HEXANE	64742-49-0 931-254-9 01-2119484651-34	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	≥50-≤75%
HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS	64742-49-0 927-510-4 01-2119475515-33	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	≥25-≤50%

Substance classifications are taken from the GB Mandatory Classification and Labelling (MCL) list, or if absent, from supplier's information.

See Section 16 for the full text of the H-statements noted above.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: Remove casualty from exposure ensuring one's own safety whilst doing so. Take off any contaminated clothing and shoes/boots immediately. Never give anything by mouth to an unconscious person.

Skin contact: Wash with soap and water. Seek medical advice if irritation develops.

Eye contact: Rinse with water for 10 minutes and seek medical advice if irritation persists.

Ingestion: Rinse mouth with water and give water to drink. Do not induce vomiting. Seek medical advice.

Inhalation: May cause drowsiness or dizziness, if affected remove to fresh air and seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed: May cause eye irritation. May cause irritation to skin with prolonged or repeated contact.

4.3 Indication of any immediate medical attention and special treatment needed: See skin and eye contact information above.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use Carbon Dioxide, Dry Powder or Foam.
Unsuitable extinguishing media: Water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Irritating/toxic fumes may be released at elevated temperatures.

5.3 Advice for fire-fighters:

Special protective equipment: Wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Standard procedure for chemical fires. Use water spray to cool unopened containers. Do not allow fire run-off to enter drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Use personal protective equipment to deal with spillage.

6.2 Environmental precautions

Do not discharge into drains or rivers, but if contamination to waterways has occurred, inform local authorities.

6.3 Methods and materials for containment and cleaning up

Use absorbent material, sand, earth, vermiculite, etc. and place in a container for disposal; flush spillage site with water.

6.4 References to other sections: See sections 8 and 13 for personal protection and disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Handle with care. General good housekeeping practices. Do not eat or drink whilst using the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well ventilated area. Keep container tightly closed.

7.3 Specific end use(s): No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical name	8hr TWA	15min STEL	Reference
RCP Aliphatic solvents 60-95, low n-hexane	1000 mg/m^3 /250 ppm	-	UK SIA

DNEL:

DNEL (workers)	HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS	HYDROCARBONS, C6, ISOALKANES, <5% n-HEXANE
Chronic systemic effects (dermal)	300 mg/kg	13964 mg/kg bw/day
Chronic systemic effects (inhalation)	2085 mg/m^3	5306 mg/m^3

DNEL (consumers)	HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS	HYDROCARBONS, C6, ISOALKANES, <5% n-HEXANE
Chronic systemic effects (dermal)	-	1377 mg/kg bw/day
Chronic systemic effects (inhalation)	447 mg/m^3	1131 mg/m^3
Chronic systemic effects (oral)	149 mg/kg	1301 mg/kg/day

PNEC: The hydrocarbon solvent is a hydrocarbon with a complex, unknown or variable composition (UVCB). Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

8.2 Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Personal protective equipment

Respiratory protection: Unlikely to be necessary in normal circumstances; if vapour levels are high, wear a respirator conforming to EN 140 with type A filter or better.

Hand protection: Wear chemically resistant gloves such as butyl rubber approved to standard EN 374; material thickness 0.5mm; break through time ≥ 480 min. Gloves must be replaced after 8 hours of wear. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Check with glove manufacturer for specific advice.

Eye protection: Chemical splash goggles if eye contact is reasonably probable. The selected goggles or glasses must satisfy the European standard EN 166.

Skin and body protection: Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. The selected protective clothing has to satisfy the standard EN 13034, which describes clothing offering limited 8 hour protection against splashes. Use PPE that is chemically resistant to the product and prevents skin contact.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices. Do not eat or drink whilst using the product. Wash hands before breaks and at the end of the work day. Wash contaminated clothing before re-use.

Environmental exposure controls: Do not discharge into drains or rivers.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State and colour	Colourless liquid
Odour	Characteristic
Odour Threshold	No data available
Flammability	Flammable
Flash point	<0ºC
Lower explosion limit	1.0%
Upper explosion limit	7.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	413°C
Oxidising properties	Non-oxidising
Solubility in water	Insoluble
Solubility in other solvents	Not determined
pH	Not applicable
Melting point/range	No data available
Boiling point/range	60-100°C
Relative density	0.685
Vapour pressure	2.7 kPa @20°C
Vapour density	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity (kinematic)	0.5 mm2/s @40°C
Evaporation rate	No data available

9.2 Other information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity	Generally non-reactive.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None if stored and used as directed.
10.4 Conditions to avoid	Hot surfaces. Sources of ignition. Flames.
10.5 Incompatible materials	Strong acids. Strong alkalis. Strong oxidising agents.
10.6 Hazardous decomposition products	Oxides of carbon, acrid smoke, irritating fumes.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Chemical name	Oral (LD50)	Inhalation (LC50)	Dermal (LD50)
HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS	>5840 mg/kg (Rat)	>23300 mg/l (Rat) 4h	>2920 mg/kg (Rat)
HYDROCARBONS, C6, ISOALKANES, <5% n-HEXANE	16750 mg/kg (Rat)	>259354 mg/l (Rat) 4h	>3350 mg/kg (Rat)

Skin corrosion/irritation: The mixture is classified as Sk. Irrit. 2, H315: Causes skin irritation.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Repeated dose toxicity: Based on available data, the classification criteria are not met.

SECTION 9: PhysiCarcinogenicity: cal and chemical properties

Carcinogenicity: Based on available data, the classification criteria are not met.

Mutagenicity: Based on available data, the classification criteria are not met.

Toxicity for reproduction: Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT): The mixture is classified as STOT SE3, H336; May cause drowsiness or dizziness.

Further information May be fatal if swallowed and product is aspirated into airways following vomiting.

SECTION 12: Ecological information

12.1 Toxicity The mixture is classified as Aquatic Chronic 2; H411: Toxic to aquatic life with long lasting effects.

Chemical name	Species	Test	Value
HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS	Daphnia Rainbow trout Algae	LC50 (48h) LC50 (96h) EC50 (72h)	3 mg/l 13.4 mg/l 10 mg/l
HYDROCARBONS, C6, ISOALKANES, <5% n-HEXANE	Daphnia Rainbow trout Algae	EC50 (48h) EC50 (96h) EC50 (72h)	31.9 mg/l 18.27 mg/l 13.6 mg/l

12.2 Persistence and degradability Readily biodegradable.
12.3 Bioaccumulative potential Low potential for bioaccumulation.
12.4 Mobility in soil Insoluble in water.
12.5 Results of PBT and vPvB assessment Not considered to be PBT or vPvB.
12.6 Other adverse effects None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations: Dispose of in accordance with local and national regulations. Do not dispose of waste into sewer. Do not dispose of together with household waste. Contact licensed waste disposal company. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn or use a cutting torch on the empty container.

SECTION 14: Transport information

14.1 UN number: 3295

14.2 UN proper shipping name: HYDROCARBONS, LIQUID, N.O.S

14.3 Transport hazard class(es): Class: 3 Transport labels:

14.4 Packing Group: II

14.5 Environment hazards: Marine Pollutant: Yes

14.6 Special precautions for user: EMS: F-E, S-E

Tunnel restriction code: (D/E)

14.7 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

UK Regulatory References
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2001 No.2677) with amendments.

GB MCL (Mandatory Classification and Labelling).

Statutory Instruments
The Chemicals (Hazard information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

S.I. 2020 No. 1577: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Guidance Notes

Health and Safety Executive Workplace Exposure Limits EH40.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been completed for all constituents of the mixture.

SECTION 16: Other information

This safety data sheet is prepared in accordance with the requirements of the UK REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation - The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020. (S.I. 2020 No. 1577).

Classification and procedure used to derive the classification for mixtures according to GB CLP:

Physical hazards:	On basis of test data/Expert
Health hazards:	judgement. Calculation method
Environmental hazards:	Calculation method

Full text of H-statements referred to under sections 2 and 3

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

CAS: Chemical Abstract Service (division of the American Chemical Society). {Section 3}.
STOT: Single Target Organ Toxicity (Section 3 and 11).
DNEL: Derived No Effect Level (Section 8).
PNEC: Predicted No Effect Concentration (Section 8).
PBT: Persistent, Bioaccumulative, Toxic. (Section 12).
vPvB: very Persistent and very Bioaccumulative. (Section 12).
EC50: Effective Concentration, 50 percent. (Section 12).
LC50: Lethal Concentration, 50 percent. (Section 11/12).
LD50: Lethal Dose, 50 percent. (Section 11).

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.