

Health & Safety Data Sheet

Date

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XRB171B(EN)

Information on the safe handling and storage of the product named.
This Sheet supersedes and replaces XRB163B and XRB171.

This Health & Safety Data Sheet is product specific & meets the current mandatory regulations.

1. Identification

- 1.1 Product Name: Lucas Brake Cleaner – All Grades
1.2 Supplier: TRW KFZ Ausrüstung GmbH
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2. Composition

Blend of aliphatic hydrocarbons and oxygenates including aliphatic alcohols.
Product does not contain aromatic hydrocarbons. n-Hexane content < 3.0% w/w.

3. Hazards identification

- 3.1 Physical Hazards: Product is highly flammable. Mixtures of vapour and air can be explosive.
3.2 Health Hazards: Harmful by aspiration. May be harmful by inhalation or ingestion.
Irritating to skin due to degreasing effect. Vapour is narcotic in high concentrations.
3.3 Environmental Hazards: Toxic to aquatic organisms (although as a preparation does not currently require classification under EU law.)

4. First Aid measures

- 4.1 Inhalation: Remove from exposure. Keep warm and at rest. In severe cases or if symptoms persist call medical attention. Give artificial respiration if necessary.
4.2 Skin Contact: Remove contaminated clothing immediately. Wash affected skin with plenty of water. Use soap if available. Obtain medical attention if irritation persists.
4.3 Eye Contact: Irrigate eye thoroughly with water for at least 10 min. holding eyelids apart if necessary. Obtain medical attention if irritation persists.
4.4 Ingestion: DO NOT INDUCE VOMITING. Wash out mouth with water and give plenty of water to drink. Obtain medical advice immediately.

5. Fire fighting measures

- 5.1 Suitable Extinguishing Media: Foam, Dry Powder, Carbon dioxide or Halon.
5.2 Unsuitable: Water jets (although these should be used to cool adjacent containers).
5.3 Exposure Hazards: Combustion products may contain carbon monoxide and sulphur dioxide. Vapour is heavier than air and may travel along ground.
5.4 Special Protective Equipment: In extreme cases, self-contained breathing apparatus may be worn.

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TRW. Original Equipment. Global Service.

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6. Accidental release measures

- 6.1 Personal Precautions: Remove all sources of ignition. Avoid contact with the liquid. Ventilate the area to dispel residual vapours. Evacuate personnel from area. Protective clothing (and under severe conditions breathing apparatus) should be worn for clearing up spillage.
- 6.2 Environmental Precaution: Prevent entry into drains and watercourses. If product has entered drains or watercourses advise appropriate authorities.
- 6.3 Methods for Cleaning up: Contain spillage with sand, earth or other inert material. Use similar materials to absorb and transfer to suitable container. Air to evaporate before disposal by approved contractor.
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7. Handling and storage

- 7.1 Storage: When packed in aerosols the product should be stored in accordance with HSE Guidance Note HS (G) 71. When otherwise packaged, storage should be in accordance with the highly flammable liquids and liquefied Petroleum Gases Regulations 1972. The Petroleum Mixtures Order 1929 may also apply.

Store in a cool well-ventilated place away from incompatible chemicals or materials. Keep container tightly closed. Avoid exposure to direct sunlight, sources of heat or a build-up of static electricity. Product may be stored in mild steel or GRP tanks.

- 7.2 Handling: Ensure good ventilation. Smoking and all other sources of ignition should be prohibited. Ensure all electrical equipment in vicinity is flameproofed. Metal vessels should be used in preference to plastic and should be electrically earthed. If the product is pumped, pump rate should not exceed 7 m/s to avoid static discharge.
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8. Exposure controls and personal protection

- 8.1 Exposure Controls: Based on the ingredients – An Occupational Exposure limit of 1200 mg/m³/8h TWA is recommended for the whole preparation. Control measures capable of achieving at least this standard should be used.
- 8.2 Personal Protection – Respiratory: Where the above limits are likely to be exceeded, self-contained or air fed, breathing apparatus should be used.
- 8.3 Personal Protection – Hand: Wear impervious „Nitrile“ rubber gloves.
- 8.4 Personal Protection – Eye: Wear close-fitting goggles where there is a risk of splashing. Eye baths should be provided at locations where accidental exposure may occur.
- 8.5 Personal Protection – Skin: Where significant exposure is possible wear impervious body covering. It is recommended that showers are provided at locations where accidental exposure may occur.
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9. Physical and chemical properties

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|---------------------|-----------------|---------------------------|
| 9.1 Appearance: | Clear liquid | Tested in accordance with |
| 9.2 Odour: | Paint Ethereal | - |
| 9.3 pH: | Approx. 8.0 | SAE J 1703 |
| 9.4 Boiling range: | 36 - 120° C | DIN 53171 |
| 9.5 Melting point: | < -70° C | |
| 9.6 Flash point: | < 0° C | DIN 51755 |
| 9.7 Ignition temp.: | Approx. 240 ° C | DIN 51794 |
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- 9.8 Explosive limits
in air: Lower = 0,6%
Upper = 12%
- 9.9 Vapour Pressure: Approx. 150 mm
Hg @ 20° C
- 9.10 Density @ 20 °C: Approx. 0.720 g/ml
- 9.11 Solubility in water: Partial
- 9.12 Evaporation Rate: 5.5
(n-Bw Acetate =1)
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10. Stability and reactivity

- 10.1 Conditions to avoid: Prevent exposure to sources of heat, ignition or static build up.
- 10.2 Materials to avoid: Reacts violently with strong acids, alkalis or oxidising agents.
- 10.3 Hazardous
Decomposition
Products: None know – Complete combustion will produce carbon dioxide and water vapour.
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11. Toxicological information

- 11.1 Inhalation: Vapours irritating to respiratory tract. May cause nausea, headache, lack of coordination and ultimately unconsciousness at high concentrations. Prolonged and repeated exposure to high concentrations may result in CNS damage.
- 11.2 Skin Contact: Product has a degreasing affect on the skin and exposure to large quantities may produce dermatitis. Product is slowly absorbed through the skin.
- 11.3 Ingestion/Aspiration: Small amounts of liquid aspirated into the lungs during ingestion or vomiting may cause bronchopneumonia or pulmonary edema.
Acute oral toxicity fairly low with general symptoms as 11.1.
- 11.4 Lethal Dose Data: LD 50 Rat = > 4000 mg / kg.
(Based on ingredients)
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12. Ecological information

- 12.1 Eco-toxicity and
Bioaccumulative: Expected to be toxic to aquatic organisms.
- 12.2 Persistence /
Degradability: Product is expected to be readily biodegradable according to OECD guidelines. Product will rapidly degrade in air.
- 12.3 Environmental
Mobility: Product is highly volatile and will rapidly evaporate to air if released into water.
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13. Disposal considerations

- 13.1 Disposal Dangers: As for spillages – a potentially toxic and exposure hazard will be caused if the spilt liquid enters the surface drains.
- 13.2 Disposal Methods: Controlled evaporation or incineration are recommended.
- 13.3 Regulation: Dispose of in accordance with local and national regulations. In the U.K. the Special Waste Regulations apply.
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14. Transport information

- 14.1 IMO Class: 3.2
- 14.2 Marine Pollutant: No
- 14.3 IATA / IACO Class: 3
- 14.4 ADR / RID: 3.3b
- 14.5 Carriage of Dangerous:
Substances in Road Tankers
and Tank Containers
Regulations 1992. Product is classified as „Flammable Liquid“
for Transport Haz. Code BYE.
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14.6	CPL Regulations 1994:	Product is classified as „Flammable Liquid“ for Conveyance Class 3 Pk. Op.II.
14.7	UN No./Class:	1993 Flammable Liquid NOS Class 3-2.

15. Regulatory information

15.1	Classification and Labelling under EU Law – Non Aerosol.	
15.1.1	Warning Symbols:	Highly Flammable - F Harmful – Xn
15.1.2	Risk Phrases:	R11 – Highly Flammable. R65 – Harmful: May cause lung damage if swallowed. R38 – Irritating to skin. R67 – Vapours may cause drowsiness and dizziness.
15.1.3	Recommended Safety Phrases:	S2 – Keep out of the reach of children. S16 – Keep away from sources of ignition – no smoking. S23 – Do not breathe spray. S51 – Use only in well ventilated areas. S62 – If swallowed do not induce vomiting: seek medical advice immediately and show this container or label. (In the case of containers larger than 5 litres - S33 – Take precautionary measures against static discharges).
15.1.4	Other:	If non-aerosol packs are offered for sale to the public, cans should be fitted with a CRC and a TDW should be applied.
15.2	Classification and Labelling under EU Law – Aerosol.	
15.2.1	Warning Symbols:	Highly Flammable – F Irritant – Xi
15.2.2	Risk Phrases:	R11 – Highly Flammable. R38 – Irritating to skin. R67 – Vapours may cause drowsiness and dizziness.
15.2.3	Recommended Safety Phrases:	Pressurised Container: Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn even after use. Do not spray on a naked flame or any incandescent material. S2 – Keep out of the reach of children. S16 – Keep away from sources of ignition. No smoking. S23 – Do not breathe spray. S51 – Use only in well ventilated areas.

16. Other information

16.1	Legal Disclaimer:	The information contained here in is based on the present knowledge and experience of TRW KFZ Ausrüstung GmbH. It in no way constitutes the users own assessment of work place risk as required by other health and safety legislation. TRW KFZ Ausrüstung GmbH does not, by supplying this information, guarantee or warrant any specific properties or qualities of goods supplied. It is the responsibility of the purchaser to determine whether the goods ordered are fit for any purpose for which they may be required. This information is provided subject to TRW KFZ Ausrüstung GmbH 'Conditions of Sale' and in particular Conditions 9 and 14 thereof.
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