



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Commercial Product Name : Brake Cleaner Aerosol 500ml

Product code : 08901087
MSDS-Identcode : 1000823
Company : Würth UK Ltd
1 Centurion Way
Erith, Kent
United Kingdom

Telephone : +44 (0)208 319 6000
Telefax : +44 (0)208 319 6400

Company : WÜRTH IRELAND LTD.
Monaclinoe Ind. Est. Ballysimon Road
Limerick
Ireland

Telephone : +353 61 430200
Telefax : +353 61 412428

Responsible/issuing person : prodsafe.wurth@technidata.com
Emergency telephone : National Chemical Emergency Centre
+44 (0)870 190 6777

Use : Cleaning agent

2. HAZARDS IDENTIFICATION



F+ Extremely flammable
Xi Irritant
N Dangerous for the environment

R12 Extremely flammable.
R36/38 Irritating to eyes and skin.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

Chemical Name	CAS-No.	EC-No. / Registration number	Classification	Concentration [%]
low boiling point hydrogen treated naphtha	64742-49-0	265-151-9	F; R11 Xi; R36/38 N; R51/53 Xn; R65 R67	>= 55 - < 60
low boiling point hydrogen treated naphtha	64742-49-0	265-151-9	F; R11 Xi; R38 N; R51/53 Xn; R65 R67	>= 20 - < 25
propan-2-ol	67-63-0	200-661-7	F; R11 R67 Xi; R36	>= 10 - < 12,5

WEL substance

carbon dioxide	124-38-9	204-696-9		>= 3 - < 5
----------------	----------	-----------	--	------------

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

- General advice : If you feel unwell, seek medical advice (show the label where possible). First aider needs to protect himself. Move out of dangerous area. Never give anything by mouth to an unconscious person. Take off contaminated clothing and shoes immediately.
- Inhalation : If breathed in, move person into fresh air. In the case of inhalation of aerosol/mist consult a physician if necessary. Keep patient warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Skin contact : In case of contact, immediately flush skin with soap and plenty of water. Do NOT use solvents or thinners. If skin irritation persists, call a physician.
- Eye contact : Protect unharmed eye. If easy to do, remove contact lens, if worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label. If swallowed, DO NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Aspiration hazard if swallowed - can enter lungs and cause damage.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO₂), Water spray jet, Dry powder, Alcohol-resistant foam
- Unsuitable extinguishing media : High volume water jet
- Specific hazards : Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products may be formed under fire conditions (see section 10). Exposure to decomposition products may be a hazard to health.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
- Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Refer to protective measures listed in sections 7 and 8. Use personal protective equipment. Remove all sources of ignition. Avoid contact with skin and eyes. Ensure adequate ventilation, especially in confined areas. Immediately evacuate personnel to safe areas. Avoid inhalation of vapour or mist. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. Avoid release to the environment. Refer to special instructions/ Safety data sheets.
- Methods for cleaning up : Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations. Clean contaminated surface thoroughly.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

7. HANDLING AND STORAGE

Handling

Advice on safe handling : Limit the stocks at work place. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin and eyes. Do not spray on a naked flame or any other incandescent material. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Take precautionary measures against static discharges. Use appropriate container to avoid environmental contamination. For personal protection see section 8.

Advice on protection against fire and explosion : Normal measures for preventive fire protection. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Keep away from heat and sources of ignition. Do not smoke. No sparking tools should be used. Electrical equipment should be protected to the appropriate standard.

Dust explosion class : not applicable

Storage

Requirements for storage areas and containers : Store in original container. BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep containers tightly closed in a dry, cool and well-ventilated place. Please observe the storage instructions for aerosols!

Advice on common storage : Incompatible with oxidizing agents. Incompatible with acids. Incompatible with bases. Keep away from food, drink and animal feedingstuffs. Do not store together with oxidizing and self-igniting products.

Other data : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Basis	Update
propan-2-ol	67-63-0	STEL: 1.250 mg/m ³ , 500 ppm TWA: 999 mg/m ³ , 400 ppm	GB EH40	2006-09-01



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

Components	CAS-No.	Control parameters	Basis	Update
carbon dioxide	124-38-9	STEL: 27.400 mg/m ³ , 15.000 ppm TWA: 9.150 mg/m ³ , 5.000 ppm	GB EH40	2005-04-06
Components	CAS-No.	Control parameters	Basis	Update
carbon dioxide	124-38-9	TWA: 9.000 mg/m ³ , 5.000 ppm	2006/15/EC	2006-02-09

Other information on limit values: see chapter 16

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Respirator with filter type A

Hand protection

Material : Nitrile rubber
Directive : DIN EN 374

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Eye protection : Tightly fitting safety goggles

Skin and body protection : Flame retardant antistatic protective clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
General industrial hygiene practice.
Do not inhale aerosol.
Avoid contact with skin, eyes and clothing.
When using do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.
Follow the skin protection plan.
Wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : aerosol
Propellant : Carbon dioxide (CO₂)
Colour : colourless
Odour : mild

Safety data

Ignition temperature : 220 °C
Lower explosion limit : 0,8 %(V)
Upper explosion limit : 15 %(V)
Explosive properties : Not explosive
In use, may form flammable/explosive vapour-air mixture.
Flammability (solid, gas) : Flammable
Melting point/range : no data available
Boiling point/boiling range : 63 °C
Vapour pressure : 8.000 mbar at 50 °C
5.500 hPa at 20 °C
Density : 0,71 g/cm³
Water solubility : partly soluble

10. STABILITY AND REACTIVITY

Conditions to avoid : Heat, flames and sparks.
Materials to avoid : Oxidizing agents, Strong acids, Strong bases



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

Hazardous decomposition products	: Carbon oxides
Hazardous reactions	: Vapours may form explosive mixtures with air. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
Stability	: No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:

low boiling point hydrogen treated naphtha	: LD50 (rat): > 5.000 mg/kg
low boiling point hydrogen treated naphtha	: LD50 (rat): > 5.000 mg/kg
propan-2-ol	: LD50 (rat): 5.045 mg/kg

Acute inhalation toxicity:

low boiling point hydrogen treated naphtha	: LC50 (rat): > 190 mg/l Exposure time: 4 h
propan-2-ol	: LC50 (rat): 46,5 mg/l Exposure time: 4 h

Acute dermal toxicity:

low boiling point hydrogen treated naphtha	: LD50 (rabbit): > 3.360 mg/kg
propan-2-ol	: LD50 (rabbit): 12.800 mg/kg

Skin irritation : Irritating to skin.
Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Eye irritation : Irritating to eyes.

Further information : May cause irritation of respiratory tract.
No tests have been carried out with the product. Classification has been carried out in accordance with the conventional method.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

12. ECOLOGICAL INFORMATION

Toxicity to fish:

propan-2-ol : LC50 (Pimephales promelas (fathead minnow)): 9.640 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates.:

propan-2-ol : EC50 (Daphnia magna (Water flea)): 13.299 mg/l
Exposure time: 48 h

Adsorbed organic bound halogens (AOX) : not included

Additional ecological information : The product should not be allowed to enter drains, water courses or the soil.
We have no quantitative data concerning the ecological effects of this product.

13. DISPOSAL CONSIDERATIONS

Advice on disposal and packaging : Disposal:
In accordance with local and national regulations. Do not empty into drains; dispose of this material and its container in a safe way.
Waste codes should be assigned by the user based on the application for which the product was used.
The following Waste Codes are only suggestions:

Waste Code (EWC) : Waste Key (unused product):
160504, gases in pressure containers (including halons) containing dangerous substances

Waste key (used product):
160504, gases in pressure containers (including halons) containing dangerous substances

Disposal of uncleaned packaging : Waste key (uncleaned packaging):
150110, packaging containing residues of or contaminated by dangerous substances

Note: 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 drum. Please ensure aerosol cans



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

are sprayed completely empty (including propellant) Containers that have not been emptied in compliance with regulations are regarded as hazardous waste. Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR

UN-Number : 1950
Description of the goods : AEROSOLS
Class : 2
Packing group : --
Classification Code : 5F
Labels : 2.1
Limited quantity : LQ2
Tunnel restriction code : (D)
Environmentally hazardous : yes

RID

UN-Number : 1950
Description of the goods : AEROSOLS
Class : 2
Packing group : --
Classification Code : 5F
Hazard identification No : 23
Labels : 2.1
Limited quantity : LQ2
Environmentally hazardous : yes

IATA

UN-Number : 1950
Description of the goods : Aerosols, flammable
Class : 2.1
Packing group : --
Labels : 2.1
Packing instruction (cargo aircraft) : 203
Environmentally hazardous : no
Packing instruction (passenger aircraft) : 203
Packing instruction (LQ) : Y203

IMDG

UN-Number : 1950
Description of the goods : AEROSOLS
(low boiling point hydrogen treated naphtha)
Class : 2.1
Packing group : --



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

Labels : 2.1
EmSNumber 1 : F-D
EmS Number 2 : S-U
Marine pollutant : yes

15. REGULATORY INFORMATION

Labelling according to EC Directives

1999/45/EC

Symbol(s) : F+ Extremely flammable
Xi Irritant
N Dangerous for the environment

R-phrases) : R12 Extremely flammable.
R36/38 Irritating to eyes and skin.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.

S-phrases(s) : S23 Do not breathe spray.
S24/25 Avoid contact with skin and eyes.
S29/35 Do not empty into drains; dispose of this material and its container in a safe way.
S51 Use only in well-ventilated areas.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Special labelling of certain mixtures : Pressurized 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 other incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

Further information : Reserved for industrial and professional use.

VOC : Directive 1999/13/EC
96 %
VOC content less water: 682 g/l

Directive (96/82/EC)		Quantity 1	Quantity 2
	Dangerous for the environment	200 t	500 t
	Extremely flammable	10 t	50 t



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Brake Cleaner Aerosol 500ml

Version 1.3

Revision Date 23.06.2010

Print Date 26.06.2010

GB / EN

Petroleum products 2.500 t 25.000 t

In accordance with Regulation (EC) No. 648/2004 on detergents : $\geq 30\%$: aliphatic hydrocarbons

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R11	Highly flammable.
R12	Extremely flammable.
R36	Irritating to eyes.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.

Other information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

Prepared by: : TechniData BCS GmbH
Birlenbacher Str. 19
D-57078 Siegen
Germany
Telephone: +49-(0)271-88072-0

Ref.: WIAG00000676