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**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

**0890108720 - Brake Cleaner**

Version 1.0

Revision Date 04.10.2013

Print Date 06.10.2013

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**1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Commercial Product Name : Brake Cleaner  
Product code : 0890108720  
MSDS-Identcode : 10037075

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

Use of the Substance/Mixture : Solvent

**1.3 Details of the supplier of the safety data sheet**

Company : Würth UK Ltd  
1 Centurion Way  
Erith, Kent  
United Kingdom  
Telephone : +44 (0)3300 555 444  
Telefax : +44 (0)3300 555 666  
Company : WÜRTH IRELAND LTD.  
Monaclinoe Ind. Est. Ballysimon Road  
Limerick  
Ireland  
Telephone : +353 61 430200  
Telefax : +353 61 412428  
Responsible/issuing person : E-mail address: prodsafe@wuerth.com

**1.4 Emergency telephone number**

National Chemical Emergency Centre  
+44 (0)870 190 6777

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**2. Hazards identification****2.1 Classification of the substance or mixture****Classification (67/548/EEC, 1999/45/EC)**

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

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## 2.2 Label elements

### Labelling according to EC Directives: 1999/45/EC

Hazard symbols

:



Highly flammable



Harmful



Dangerous for the environment

R-phrases(s)

: R11  
R38  
R51/53

Highly flammable.  
Irritating to skin.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Harmful: may cause lung damage if swallowed. Vapours may cause drowsiness and dizziness.

R65  
R67

S-phrases(s)

: S16  
  
S23  
S24/25  
S29/35  
  
S33  
  
S62  
  
S61

Keep away from sources of ignition - No smoking.  
Do not breathe vapour.  
Avoid contact with skin and eyes.  
Do not empty into drains; dispose of this material and its container in a safe way.  
Take precautionary measures against static discharges.  
If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.  
Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Hazardous components which must be listed on the label:

- low boiling point hydrogen treated naphtha

## 2.3 Other hazards

no data available

## 3. Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous components

Chemical Name	CAS-No.	Classification (67/548/EEC)	Classification (1272/2008/EC)	Concentration [%]
	EC-No.			

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	Registration number			
low boiling point hydrogen treated naphtha	64742-49-0	F; R11 Xi; R38 N; R51/53 Xn; R65 R67	Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 90 - < 95
	265-151-9			
isopropanol	67-63-0	F; R11 Xi; R36 R67	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 10 - < 12,5
	200-661-7			

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

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. First aid measures

### 4.1 Description of first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately (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.
- If inhaled : If breathed in, move person into fresh air. If symptoms persist, call a physician. Keep patient warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- In case of 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.
- In case of 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.
- If swallowed : If a person vomits when lying on his back, place him in the recovery position. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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

no data available

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

no data available

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**5. Firefighting measures****5.1 Extinguishing media**

Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>), Dry powder, Water spray jet, Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting : 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.

**5.3 Advice for firefighters**

Special protective equipment for firefighters : 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. Pay attention to flashback.

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

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.

**6.2 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.

**6.3 Methods and materials for containment and 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.

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**6.4 Reference to other sections**

see chapter: 7, 8, 11, 12 and 13

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**7. Handling and storage****7.1 Precautions for safe handling**

Advice on safe handling : Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin and eyes. 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. For personal protection see section 8. Use appropriate container to avoid environmental contamination.

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

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Store in original container. Keep away from heat. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep in an area equipped with solvent resistant flooring.

Advice on common storage : Incompatible with oxidizing agents. Do not store near combustible materials. Keep away from food, drink and animal feedingstuffs.

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

**7.3 Specific end use(s)**

no data available

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**8. Exposure controls/personal protection****8.1 Control parameters**

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

Other information on limit values: see chapter 16

**8.2 Exposure controls****Engineering measures**

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

**Personal protective equipment**

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Respirator with filter type A

Hand protection

Material : Nitrile rubber  
Rate of permeability : > 480 min

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  
Safety shoes  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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**Hygiene measures**

- : Handle in accordance with good industrial hygiene and safety practice.  
General industrial hygiene practice.  
Avoid breathing vapours, mist or gas.  
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.

**Environmental exposure controls****General advice**

- : 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.

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**9. Physical and chemical properties****9.1 Information on basic physical and chemical properties**

- |                             |   |
|-----------------------------|---|
| Appearance                  | : liquid  |
| Colour                      | : colourless  |
| Odour                       | : characteristic  |
| Odour Threshold             | : no data available   |
| Flash point                 | : < 0 °C  |
| Ignition temperature        | : 275 °C  |
| Thermal decomposition       | : no data available   |
| Lower explosion limit       | : no data available   |
| Upper explosion limit       | : no data available   |
| Explosive properties        | : Not explosive<br>In use, may form flammable/explosive vapour-air mixture. |
| Flammability                | : no data available   |
| Oxidizing properties        | : no data available   |
| Auto-ignition temperature   | : not auto-flammable  |
| Burning number              | : no data available   |
| Molecular weight            | : no data available   |
| pH                          | : not applicable  |
| Boiling point/boiling range | : > 80 °C   |
| Vapour pressure             | : ca. 40 hPa at 20 °C   |

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Density : no data available  
Bulk density : no data available  
Water solubility : partly miscible

Partition coefficient: n-octanol/water : no data available  
Solubility in other solvents : no data available  
Viscosity, dynamic : no data available  
Viscosity, kinematic : no data available  
Flow time : no data available  
Impact sensitivity : no data available  
Relative vapour density : no data available  
Surface tension : no data available  
Evaporation rate : no data available  
Minimum ignition energy : no data available  
Acid number : no data available  
Refraction index : no data available  
Miscibility in water : no data available  
Solvent separation test : no data available

**9.2 Other information**

None known.

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**10. Stability and reactivity****10.1 Reactivity**

no data available

**10.2 Chemical stability**

The product is chemically stable.

**10.3 Possibility of hazardous reactions**

Stability : No decomposition if stored and applied as directed.  
Vapours may form explosive mixtures with air.

**10.4 Conditions to avoid**

Heat, flames and sparks.

**10.5 Incompatible materials**

Materials to avoid : Strong oxidizing agents, Combustible material

**10.6 Hazardous decomposition products**

Hazardous decomposition products : Carbon oxides



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**11. Toxicological information****11.1 Information on toxicological effects****Acute toxicity**Acute oral toxicity:

isopropanol : LD50 rat: 5.045 mg/kg

Acute inhalation toxicity:

isopropanol : LC50 rat: 46,5 mg/l  
Exposure time: 4 h

Acute dermal toxicity:

isopropanol : LD50 rabbit: 12.800 mg/kg

Acute toxicity (other routes of administration):

no data available

**Skin corrosion/irritation**Skin irritation

: Skin irritation  
Irritating to skin.  
Prolonged skin contact may defat the skin and produce dermatitis.

**Serious eye damage/eye irritation**

isopropanol : Irritating to eyes.

**Respiratory or skin sensitisation**Sensitisation:

no data available

**Germ cell mutagenicity**Genotoxicity in vitro:

no data available

Genotoxicity in vivo:

no data available

**Carcinogenicity**

no data available

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**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

**STOT - single exposure**

low boiling point hydrogen  
treated naphtha : May cause drowsiness or dizziness.

isopropanol : May cause drowsiness or dizziness.

**STOT - repeated exposure**

no data available

**Aspiration hazard**Aspiration toxicity

low boiling point hydrogen  
treated naphtha : May be fatal if swallowed and enters airways.

**Neurological effects**

no data available

**Toxicology Assessment**Toxicology, Metabolism, Distribution

no data available

Acute effects

no data available

**Further information**

: May cause irritation of the mucous membranes.  
Symptoms of overexposure may be headache, dizziness, tiredness,  
nausea and vomiting.  
Aspiration hazard if swallowed - can enter lungs and cause damage.  
Even the smallest quantities that enter into the lung due to swallow-  
ing or subsequent vomiting can lead to a pulmonary oedema or  
pneumonia.

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**12. Ecological information****12.1 Toxicity**

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Toxicity to fish

isopropanol : LC50 (Pimephales promelas (fathead minnow)): 9.640 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates

isopropanol : EC50 (Daphnia magna (Water flea)): 13.299 mg/l  
Exposure time: 48 h

**Ecotoxicology Assessment**Acute aquatic toxicity

low boiling point hydrogen : Toxic to aquatic life.  
treated naphtha

Chronic aquatic toxicity

low boiling point hydrogen : Toxic to aquatic life with long lasting effects.  
treated naphtha

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

Adsorbed organic bound halo- : Remarks:  
gens (AOX) not included

Additional ecological information : The product should not be allowed to enter drains, water courses or  
the soil.

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**13. Disposal considerations****13.1 Waste treatment methods**

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Advice on disposal and packaging : Disposal:  
In accordance with local and national regulations. Do not dispose of waste into sewer. This material and its container must be disposed of as hazardous waste. Do not dispose of together with household waste.  
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):  
070104, other organic solvents, washing liquids and mother liquors

Waste key (used product):  
070104, other organic solvents, washing liquids and mother liquors

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. Dispose of as unused product.

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**14. Transport information****14.1 UN number**

ADR : 1993  
RID : 1993  
IMDG : 1993  
IATA : 1993

**14.2 Proper shipping name**

ADR : FLAMMABLE LIQUID, N.O.S.  
(naphtha (petroleum), hydrotreated light)  
RID : FLAMMABLE LIQUID, N.O.S.  
(naphtha (petroleum), hydrotreated light)  
IMDG : FLAMMABLE LIQUID, N.O.S.  
(naphtha (petroleum), hydrotreated light)  
IATA : FLAMMABLE LIQUID, N.O.S.  
(naphtha (petroleum), hydrotreated light)

**14.3 Transport hazard class(es)**

ADR : 3  
RID : 3  
IMDG : 3  
IATA : 3

**14.4 Packing group**

ADR :  
Packing group : II

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Classification Code : F1  
Hazard Identification Number : 33  
Labels : 3  
Limited quantity : 1,00 L  
Tunnel restriction code : (D/E)

**RID**

Packing group : II  
Classification Code : F1  
Hazard Identification Number : 33  
Labels : 3  
Limited quantity : 1,00 L

**IMDG**

Packing group : II  
Labels : 3  
EmS Number : F-E, S-E

**IATA**

Packing instruction (cargo aircraft) : 364  
Packing instruction (passenger aircraft) : 353  
Packing instruction (LQ) : Y341  
Packing group : II  
Labels : 3

**14.5 Environmental hazards****ADR**

Environmentally hazardous : yes  
Special Provision 640D

**RID**

Environmentally hazardous : yes  
Special Provision 640D

**IMDG**

Marine pollutant : yes

**IATA**

Environmentally hazardous : no

**14.6 Special precautions for user**

see chapter: 6, 7 and 8

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

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

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VOC	: Directive 1999/13/EC VOC content less water: 730 g/l		
Directive (96/82/EC)	: Update: 2003 Highly flammable	Quantity 1 5.000 t	Quantity 2 50.000 t
	Update: 2003 Dangerous for the environment	200 t	500 t
	Update: 2003 Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams)	2.500 t	25.000 t
In accordance with Regulation (EC) No. 648/2004 on detergents	: $\geq 30$ %: aliphatic hydrocarbons		
Further information	: Reserved for industrial and professional use.		

**15.2 Chemical Safety Assessment**no data available

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**16. Other information****Full text of R-phrases referred to under sections 2 and 3**

R11	Highly flammable.
R36	Irritating to eyes.
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.

**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.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

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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.

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