

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

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

1.1 Product identifier

Trade name : Brake Cleaner
Product code : 0890108725

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

Use of the Sub-stance/Mixture : Cleaning agent, Detergent
Professional use product

1.3 Details of the supplier of the safety data sheet

Company : Würth UK Ltd
1 Centurion Way
Erith, Kent

Telephone : +44 (0)3300 555 444
Telefax : +44 (0)3300 555 666
E-mail address of person responsible for the SDS : prodsafe@wuerth.com

1.4 Emergency telephone number

+44 (0)870 190 6777

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3	H336: May cause drowsiness or dizziness.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters airways.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Hazard pictograms :

Signal word : Danger

Hazard statements : 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.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P273 Avoid release to the environment.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P391 Collect spillage.

Hazardous components which must be listed on the label:
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
Propan-2-ol

2.3 Other hazards

Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0 295-763-1 01-2119475514-35	Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 50 - < 70
Propan-2-ol	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 20 - < 30

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version	Revision Date:	SDS Number:	Date of last issue: 01.05.2020
4.4	16.11.2020	1761712-00005	Date of first issue: 19.03.2015

SECTION 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.
When symptoms persist or in all cases of doubt seek medical advice.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical attention.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.
If vomiting occurs have person lean forward.
Call a physician or poison control centre immediately.
Rinse mouth thoroughly with water.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Risks : May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically and supportively.
-

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version	Revision Date:	SDS Number:	Date of last issue: 01.05.2020
4.4	16.11.2020	1761712-00005	Date of first issue: 19.03.2015

Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance.
Vapours may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Remove all sources of ignition.
Ventilate the area.
Use personal protective equipment.
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapours/mists with a water spray jet.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version	Revision Date:	SDS Number:	Date of last issue: 01.05.2020
4.4	16.11.2020	1761712-00005	Date of first issue: 19.03.2015

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- | | | |
|-------------------------|---|--|
| Technical measures | : | See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section. |
| Local/Total ventilation | : | If sufficient ventilation is unavailable, use with local exhaust ventilation.
Use explosion-proof electrical, ventilating and lighting equipment. |
| Advice on safe handling | : | Do not get on skin or clothing.
Avoid breathing mist or vapours.
Do not swallow.
Do not get in eyes.
Wash skin thoroughly after handling.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Non-sparking tools should be used.
Keep container tightly closed.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment. |
| Hygiene measures | : | If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. |

7.2 Conditions for safe storage, including any incompatibilities

- | | | |
|---|---|---|
| Requirements for storage areas and containers | : | Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition. |
|---|---|---|

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Advice on common storage : Do not store with the following product types:
Strong oxidizing agents
Organic peroxides
Flammable solids
Pyrophoric liquids
Pyrophoric solids
Self-heating substances and mixtures
Substances and mixtures, which in contact with water, emit flammable gases
Explosives
Gases

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Propan-2-ol	67-63-0	TWA	400 ppm 999 mg/m ³	GB EH40
		STEL	500 ppm 1,250 mg/m ³	GB EH40

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Propan-2-ol	Workers	Inhalation	Long-term systemic effects	500 mg/m ³
	Workers	Skin contact	Long-term systemic effects	888 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	89 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	319 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	26 mg/kg bw/day
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Workers	Inhalation	Long-term systemic effects	2035 mg/m ³
	Workers	Skin contact	Long-term systemic effects	773 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	608 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	699 mg/kg

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

			effects	bw/day
	Consumers	Ingestion	Long-term systemic effects	699 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Propan-2-ol	Fresh water	140.9 mg/l
	Marine water	140.9 mg/l
	Intermittent use/release	140.9 mg/l
	Sewage treatment plant	2251 mg/l
	Fresh water sediment	552 mg/kg dry weight (d.w.)
	Marine sediment	552 mg/kg dry weight (d.w.)
	Soil	28 mg/kg dry weight (d.w.)
	Oral (Secondary Poisoning)	160 mg/kg food

8.2 Exposure controls

Engineering measures

Minimize workplace exposure concentrations.
If sufficient ventilation is unavailable, use with local exhaust ventilation.
Use explosion-proof electrical, ventilating and lighting equipment.

Personal protective equipment

Eye protection : Wear the following personal protective equipment:
Safety goggles
Equipment should conform to BS EN 166

Hand protection

Material : butyl-rubber
Break through time : > 480 min
Glove thickness : > 0.55 mm
Directive : Equipment should conform to BS EN 374
Protective index : Class 6

Material : Latex gloves
Break through time : > 480 min
Glove thickness : > 0.55 mm
Directive : Equipment should conform to BS EN 374
Protective index : Class 6

Material : Neoprene
Break through time : > 480 min
Glove thickness : > 0.55 mm
Directive : Equipment should conform to BS EN 374
Protective index : Class 6

Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : > 0.55 mm
Directive : Equipment should conform to BS EN 374

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Protective index	: Class 6
Material	: PVA
Break through time	: > 480 min
Glove thickness	: > 0.55 mm
Directive	: Equipment should conform to BS EN 374
Protective index	: Class 6
Material	: PVC
Break through time	: > 480 min
Glove thickness	: > 0.55 mm
Directive	: Equipment should conform to BS EN 374
Protective index	: Class 6
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. Wash hands before breaks and at the end of workday.
Skin and body protection	: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Wear the following personal protective equipment: If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic protective clothing. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
Respiratory protection	: If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection. Equipment should conform to BS EN 14387
Filter type	: Combined particulates and organic vapour type (A-P)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: clear, colourless
Odour	: characteristic, solvent-like, hydrocarbon-like
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Initial boiling point and boiling range : 65 - 95 °C (1,013 hPa)

Flash point : < -15 °C
Method: closed cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Upper explosion limit / Upper flammability limit : 12.0 %(V)

Lower explosion limit / Lower flammability limit : 1.0 %(V)

Vapour pressure : 12.5 kPa (20 °C)

Relative vapour density : No data available

Density : 0.687 g/cm³ (20 °C)

Solubility(ies)
Water solubility : insoluble

Partition coefficient: n-octanol/water : Not applicable

Auto-ignition temperature : 400 °C

Decomposition temperature : No data available

Viscosity
Viscosity, kinematic : 0.5 mm²/s (20 °C)

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

Flammability (liquids) : Ignitable (see flash point)

Refractive index : 1.978

Particle size : Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version	Revision Date:	SDS Number:	Date of last issue: 01.05.2020
4.4	16.11.2020	1761712-00005	Date of first issue: 19.03.2015

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Highly flammable liquid and vapour.
Vapours may form explosive mixture with air.
Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.61 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Propan-2-ol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 25 mg/l
Exposure time: 6 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Propan-2-ol:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Species : Rabbit
Result : No eye irritation

Propan-2-ol:

Species : Rabbit
Result : Irritation to eyes, reversing within 21 days

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Test Type : Buehler Test
Exposure routes : Skin contact
Species : Guinea pig
Result : negative

Propan-2-ol:

Test Type : Buehler Test
Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : negative

Germ cell mutagenicity

Not classified based on available information.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Rat
Application Route: inhalation (vapour)
Method: OPPTS 870.5395
Result: negative

Propan-2-ol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Intraperitoneal injection
Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Species : Mouse
Application Route : Skin contact
Exposure time : 102 weeks
Result : negative

Propan-2-ol:

Species : Rat
Application Route : inhalation (vapour)
Exposure time : 104 weeks
Method : OECD Test Guideline 451
Result : negative

Reproductive toxicity

Not classified based on available information.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Application Route: inhalation (vapour)
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
Species: Rat
Application Route: inhalation (vapour)
Result: negative

Propan-2-ol:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Result: negative

STOT - single exposure

May cause drowsiness or dizziness.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Assessment : May cause drowsiness or dizziness.

Propan-2-ol:

Assessment : May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Species : Rat
NOAEL : > 20 mg/l
Application Route : inhalation (vapour)
Exposure time : 13 Weeks

Propan-2-ol:

Species : Rat
NOAEL : 12.5 mg/l
Application Route : inhalation (vapour)
Exposure time : 104 Weeks

Aspiration toxicity

May be fatal if swallowed and enters airways.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

- Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): 8.2 mg/l
Exposure time: 96 h
Test substance: Water Accommodated Fraction
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.5 mg/l
Exposure time: 48 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials
- Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): 3.1 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- NOELR (Pseudokirchneriella subcapitata (green algae)): 0.5 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 2.6 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

Propan-2-ol:

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 24 h
- Toxicity to microorganisms : EC50 (Pseudomonas putida): > 1,050 mg/l
Exposure time: 16 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

12.2 Persistence and degradability

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 77.05 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Propan-2-ol:

Biodegradability : Result: rapidly degradable

BOD/COD : BOD: 1.19 (BOD5)
COD: 2.23
BOD/COD: 53 %

12.3 Bioaccumulative potential

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Partition coefficient: n- : log Pow: 4
octanol/water Remarks: Based on data from similar materials

Propan-2-ol:

Partition coefficient: n- : log Pow: 0.05
octanol/water

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or ex-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version	Revision Date:	SDS Number:	Date of last issue: 01.05.2020
4.4	16.11.2020	1761712-00005	Date of first issue: 19.03.2015

pose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product.

Waste Code : The following Waste Codes are only suggestions:

used product
20 01 29, detergents containing hazardous substances

unused product
20 01 29, detergents containing hazardous substances

uncleaned packagings
15 01 10, packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number

ADN	: UN 1993
ADR	: UN 1993
RID	: UN 1993
IMDG	: UN 1993
IATA	: UN 1993

14.2 UN proper shipping name

ADN	: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Propan-2-ol)
ADR	: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Propan-2-ol)
RID	: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Propan-2-ol)
IMDG	: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Propan-2-ol)
IATA	: Flammable liquid, n.o.s. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Propan-2-ol)

14.3 Transport hazard class(es)

ADN	: 3
ADR	: 3
RID	: 3

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

IMDG : 3

IATA : 3

14.4 Packing group

ADN

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

ADR

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3
Tunnel restriction code : (D/E)

RID

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IMDG

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

IATA (Cargo)

Packing instruction (cargo aircraft) : 364
Packing instruction (LQ) : Y341
Packing group : II
Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passenger aircraft) : 353
Packing instruction (LQ) : Y341
Packing group : II
Labels : Flammable Liquids

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version 4.4 Revision Date: 16.11.2020 SDS Number: 1761712-00005 Date of last issue: 01.05.2020
Date of first issue: 19.03.2015

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Conditions of restriction for the following entries should be considered: Number on list 3
- REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable
- REACH - List of substances subject to authorisation (Annex XIV) : Not applicable
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable
- Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable
- Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL HAZARDS	200 t	500 t
P5c	FLAMMABLE LIQUIDS	5,000 t	50,000 t
34	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),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environ-	2,500 t	25,000 t

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version	Revision Date:	SDS Number:	Date of last issue: 01.05.2020
4.4	16.11.2020	1761712-00005	Date of first issue: 19.03.2015

mental hazards as the products referred to in points (a) to (d)

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 687 g/l
Remarks: VOC content excluding water

Regulation (EC) No. 648/2004, as amended : 30 % and more: Aliphatic hydrocarbons

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information : Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of H-Statements

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.

Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard
Asp. Tox. : Aspiration hazard
Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Skin Irrit. : Skin irritation
STOT SE : Specific target organ toxicity - single exposure
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Brake Cleaner

Version	Revision Date:	SDS Number:	Date of last issue: 01.05.2020
4.4	16.11.2020	1761712-00005	Date of first issue: 19.03.2015

Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Classification of the mixture:

Flam. Liq. 2	H225
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Chronic 2	H411

Classification procedure:

Based on product data or assessment
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

GB / EN