

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

1.1 Product identifier

Brake Cleaner Spray
Article number: 200001
UFI: W0WU-XJFU-F006-4K44

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

1.2.1 Relevant uses

Brake Cleaner

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company Ferdinand Bilstein GmbH + Co. KG
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Homepage www.febi.com
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1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
Skin Irrit. 2: H315 Causes skin irritation.
Eye Irrit. 2: H319 Causes serious eye irritation.
STOT SE 3: H336 May cause drowsiness or dizziness.
Repr. 2: H361f Suspected of damaging fertility.
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms



Signal word

DANGER

Contains:

Naphtha (petroleum), hydrotreated light
Propan-2-ol

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P261 Avoid breathing vapours / spray.
P201 Obtain special instructions before use.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P312 Call a POISON CENTER / doctor if you feel unwell.
P405 Store locked up.
P280 Wear protective gloves / eye protection / face protection.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.
P501 Dispose of contents/container in accordance with local/national regulation.

Cleaner, 648/2004/CE, contains:

>=30% aliphatic hydrocarbons

2.3 Other hazards

Human health dangers

Frequent persistent contact with the skin can cause skin irritation.

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
40 - 90	Naphtha (petroleum), hydrotreated light
	CAS: 64742-49-0, EINECS/ELINCS: 265-151-9, EU-INDEX: 649-328-00-1, Reg-No.: 01-2119475133-43
	GHS/CLP: Flam. Liq. 2: H225 - Asp. Tox. 1: H304 - Skin Irrit. 2: H315 - STOT SE 3: H336 - Repr. 2: H361f - Aquatic Chronic 2: H411
10 - 50	Propan-2-ol
	CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0, Reg-No.: 01-2119457558-25-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336
3 - 5	Carbon dioxide (EU occupational exposure limit value)
	CAS: 124-38-9, EINECS/ELINCS: 204-696-9
	GHS/CLP: Press. Gas: H280

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
Naphtha - [contains less than 0,1 % w/w benzene (EINECS No 200-753-7)]
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Take off contaminated clothing and wash before reuse.
Inhalation	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
Skin contact	In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Do not induce vomiting. Get medical advice. Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Foam. Dry powder. Water spray jet. Carbon dioxide.
Extinguishing media that must not be used	Full water jet.

5.2 Special hazards arising from the substance or mixture

risk of formation of toxic pyrolysis products, carbon monoxide (CO), not combusted hydrocarbons
Bursting aerosols can be forcibly projected from a fire.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up residues with absorbent material (e.g. oil binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Keep away from all sources of ignition - Refrain from smoking.
Do not eat, drink or smoke when using this product.
Take off contaminated clothing and wash before reuse.
Clean skin thoroughly after work, apply skin cream.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Do not store together with oxidizing agents.
Keep in a cool place, heat causes increase in pressure and risk of bursting.
Protect from heat/overheating and from sun.
Keep container in a well-ventilated place.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Naphtha (petroleum), hydrotreated light
CAS: 64742-49-0, EINECS/ELINCS: 265-151-9, EU-INDEX: 649-328-00-1, Reg-No.: 01-2119475133-43
Long-term exposure: 1200 mg/m ³
Carbon dioxide (EU occupational exposure limit value)
CAS: 124-38-9, EINECS/ELINCS: 204-696-9
Long-term exposure: 5000 ppm, 9150 mg/m ³
Short-term exposure (15-minute): 15000 ppm, 27400 mg/m ³
Propan-2-ol
CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0
Long-term exposure: 400 ppm, 999 mg/m ³
Short-term exposure (15-minute): 500 ppm, 1250 mg/m ³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Carbon dioxide (EU occupational exposure limit value)
CAS: 124-38-9, EINECS/ELINCS: 204-696-9
Eight hours: 5000 ppm, 9000 mg/m ³

DNEL

Substance
Naphtha (petroleum), hydrotreated light, CAS: 64742-49-0
Industrial, inhalative, Long-term - local effects, 837.5 mg/m ³ (AF=6) 1 066.67 mg/m ³ 1 066.67 mg/m ³
Industrial, inhalative, Acute - local effects, 1 066.67 mg/m ³ (AF=9) 1 066.67 mg/m ³ 1 066.67 mg
Industrial, inhalative, Acute - systemic effects, 1 286.4 mg/m ³ (AF=9)
Industrial, inhalative, Long-term - systemic effects, 1.9 mg/m ³
general population, inhalative, Acute - local effects, 9600 mg/m ³ (AF=3) 1 066.67 mg/m ³ 1 066.67 mg/m ³
general population, inhalative, Long-term - local effects, 178.57 mg/m ³ (AF=10) 1 066.67 mg/m ³ 1 066.67 mg/
general population, inhalative, Acute - systemic effects, 1152 mg/m ³ (AF=15) 1 066.67 mg/m ³ 1 066.67 mg/m ³
general population, inhalative, Long-term - systemic effects, 0.41 mg/m ³ 1 066.67 mg/m ³ 1 066.67 mg/m ³ (AF=6)
Propan-2-ol, CAS: 67-63-0
Industrial, inhalative, Long-term - systemic effects, 500 mg/m ³
Industrial, dermal, Long-term - systemic effects, 888 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 89 mg/m ³
general population, dermal, Long-term - systemic effects, 319 mg/kg bw/day

general population, oral, Long-term - systemic effects, 26 mg/kg
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PNEC

Substance
Naphtha (petroleum), hydrotreated light, CAS: 64742-49-0
There are no PNEC values established for the substance.
Propan-2-ol, CAS: 67-63-0
freshwater, 140.9 mg/l
seawater, 140.9 mg/l
sediment (freshwater), 552 mg/kg
sediment (seawater), 552 mg/kg
soil, 28 mg/kg
sewage treatment plants (STP), 2251 mg/l

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. > 0.7 mm: Butyl rubber, >480 min (EN 374-1/-2/-3).
Skin protection	light protective clothing
Other	Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Respiratory protection mask in the event of high concentrations. Short term: filter apparatus, filter AX (DIN EN 14387).
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	aerosol
Form	aerosol
Color	colourless
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	No information available.
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	
Density [g/cm ³]	0.743
Relative density	not determined
Bulk density [kg/m ³]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	not applicable
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Risk of bursting.

10.4 Conditions to avoid

See SECTION 7.2.

Warming

Strong heating.

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10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Flammable gases/vapours.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

Substance
Naphtha (petroleum), hydrotreated light, CAS: 64742-49-0
LD50, oral, Rat, > 5000 mg/kg
Propan-2-ol, CAS: 67-63-0
LD50, oral, Rat, 5840 mg/kg OECD 401

Acute dermal toxicity

Substance
Naphtha (petroleum), hydrotreated light, CAS: 64742-49-0
LD50, dermal, Rabbit, > 5000 mg/kg
Propan-2-ol, CAS: 67-63-0
LD50, dermal, Rabbit, 13900 mg/kg OECD 402

Acute inhalational toxicity

Substance
Carbon dioxide (EU occupational exposure limit value), CAS: 124-38-9
LC0, inhalative, Human, 90000 ppm IUCLID
Propan-2-ol, CAS: 67-63-0
LC50, inhalative, Rat, > 25 mg/l (6h) OECD 403

Serious eye damage/irritation

Toxicological data of complete product are not available.
 Irritant
 Calculation method

Skin corrosion/irritation

Toxicological data of complete product are not available.
 Irritant
 Calculation method

Respiratory or skin sensitisation

Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — single exposure

Toxicological data of complete product are not available.
 Vapours may cause drowsiness and dizziness.
 Calculation method

Specific target organ toxicity — repeated exposure

Toxicological data of complete product are not available.
 May cause damage to organs through prolonged or repeated exposure through inhalation.
 Calculation method

Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity

Toxicological data of complete product are not available.
 Suspected of damaging fertility.
 Calculation method

Carcinogenicity

Based on the available information, the classification criteria are not fulfilled.

Aspiration hazard

Based on the available information, the classification criteria are fulfilled.

General remarks

Toxicological data of complete product are not available.
 The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

11.2 Information on other hazards

Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

Other information

none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Carbon dioxide (EU occupational exposure limit value), CAS: 124-38-9
LC0, (96h), Rainbow trout, 35 mg/L (IUCLID)
Naphtha (petroleum), hydrotreated light, CAS: 64742-49-0
LL50, fish, 8.3 mg/l
Propan-2-ol, CAS: 67-63-0
LC50, (24h), Daphnia magna, 9714 mg/l
LC50, (96h), Pimephales promelas, 9640 mg/l
EC50, (72h), Scenedesmus subspicatus, > 100 mg/l

12.2 Persistence and degradability

Behaviour in environment compartments

Behaviour in sewage plant No information available.

Biological degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.

Do not discharge product unmonitored into the environment or into the drainage.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
For recycling, consult manufacturer.

Waste no. (recommended)

160504* gases in pressure containers (including halons) containing dangerous substances

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended)

150110* packaging containing residues of or contaminated by hazardous substances
150104

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to
ADR/RID 1950

Inland navigation (ADN) 1950

Marine transport in accordance with
IMDG 1950

Air transport in accordance with IATA 1950


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14.2 UN proper shipping name

Transport by land according to ADR/RID Aerosols
- Classification Code 5F
- Label 
- ADR LQ 1 l
- ADR 1.1.3.6 (8.6) Transport category (tunnel restriction code) 2 (D)

Inland navigation (ADN) Aerosols
- Classification Code 5F
- Label 

Marine transport in accordance with IMDG Aerosols (Solvent Naphtha)
- EMS F-D, S-U
- Label  
- IMDG LQ 1 l

Air transport in accordance with IATA Aerosols, flammable
- Label 

14.3 Transport hazard class(es)

Transport by land according to ADR/RID 2
Inland navigation (ADN) 2
Marine transport in accordance with IMDG 2.1
Air transport in accordance with IATA 2.1

14.4 Packing group

Transport by land according to ADR/RID not applicable
Inland navigation (ADN) not applicable
Marine transport in accordance with IMDG not applicable
Air transport in accordance with IATA not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	yes
Inland navigation (ADN)	yes
Marine transport in accordance with IMDG	MARINE POLLUTANT
Air transport in accordance with IATA	yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	97%

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H319 Causes serious eye irritation.
H280 Contains gas under pressure; may explode if heated.
H411 Toxic to aquatic life with long lasting effects.
H361f Suspected of damaging fertility.
H336 May cause drowsiness or dizziness.
H315 Causes skin irritation.
H304 May be fatal if swallowed and enters airways.
H225 Highly flammable liquid and vapour.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV@TWA = Threshold limit value – time-weighted average
TLV@STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Aerosol 1: H222 Extremely flammable aerosol. (Bridging principle "Aerosols") H229
Pressurised container: May burst if heated. (Bridging principle "Aerosols")
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)
Repr. 2: H361f Suspected of damaging fertility. (Calculation method)
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (Bridging principle "Aerosols")

Modified position

none