

Trade name: Böttcherin FR-1000

Status: 11.3.2004

Product no.: 10034

Version: 4.1.0 / GB

1.) Identification of the substance/preparation and company

Product details

Trade name

Böttcherin FR-1000

Use

cleaner for damping units

Identification of the manufacturer / supplier

Address

Felix Böttcher GmbH & Co. KG
Stolberger Str. 351-353
D-50933 Köln

Telephone no. +49 (0) 221 4907-1

Fax no. +49 (0) 221 4907-444

Emergency telephone number

+49 (0)30 192 40 (Toxic Substance Emergency Call Center Berlin)

2.) Composition / information on ingredients

Chemical characterization

Mixture (preparation)

Hazardous ingredients

HEPTANE

EC no.	205-563-8	Index no.	601-008-00-2	CAS no.	142-82-5
Concentration	> 60	< 80	%-b.w.		
Classification	F; R11	Xn; R65	Xi; R38	N; R50-53	R67
Hazard symbols	F, Xn, N		R phrases	11-38-50/53-65-67	

METHYL ACETATE

EC no.	201-185-2	Index no.	607-021-00-X	CAS no.	79-20-9
Concentration	> 10	< 30	%-b.w.		
Classification	F; R11	Xi; R36	R67	R66	
Hazard symbols	F, Xi		R phrases	11-36-66-67	

PROPAN-2-OL

EC no.	200-661-7	Index no.	603-117-00-0	CAS no.	67-63-0
Concentration	> 10	< 30	%-b.w.		
Classification	F; R11	Xi; R36	R67		
Hazard symbols	F, Xi		R phrases	11-36-67	

3.) Hazards identification

Classification

F; R11	Highly flammable.
Xn; R65	Harmful: may cause lung damage if swallowed.
Xi; R36/38	Irritating to eyes and skin.
N; R50-53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Hazard symbols

F	Highly flammable
Xn	Harmful
N	Dangerous for the environment

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R phrases

11	Highly flammable.
36/38	Irritating to eyes and skin.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
67	Vapours may cause drowsiness and dizziness.

4.) First aid measures**General information**

In case of persisting adverse effects consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration. Summon a doctor immediately.

After skin contact

Wash off immediately with soap and water.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Eye treatment by an oculist.

After ingestion

Do not induce vomiting - aspiration hazard. Never give anything by mouth to an unconscious person. If individual is drowsy or unconscious, place in recovery position (on left side, with head down). Summon a doctor immediately.

5.) Fire-fighting measures**Suitable extinguishing media**

Alcohol-resistant foam; extinguishing powder; Water spray jet; Carbon dioxide

Extinguishing media that must not be used for safety reasons

Full water jet

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide and smoke.

Special protective equipment for firefighting

Use self-contained breathing apparatus. Wear protective clothing.

Other information

Cool endangered containers with water spray jet. Suppress gases/vapours/mists with water spray jet.

6.) Accidental release measures**Personal precautions**

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away sources of ignition.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater. In case of entry into waterways, soil or drains, inform the responsible authorities.

Methods for cleaning up/taking up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). Send in suitable containers for recovery or disposal.

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7.) Handling and storage

Handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Avoid formation of aerosols. Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far as it is possible by the state of the art.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition. Use explosion-proof equipment/fittings and non-sparking tools.

Storage

Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Advice on storage assembly

Do not store together with:
Oxidizing agents
Acids

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place. Protect from heat and direct sunlight.

8.) Exposure controls / personal protection

Exposure limit values

HEPTANE

CAS no. 142-82-5
EC no. 205-563-8

2000/39/EWG

n-Heptane
TWA 2085 mg/m³ 500 ml/m³

Occupational Exposure Standards (OESs) / EH40

n-Heptane
TWA 500 ml/m³

METHYL ACETATE

CAS no. 79-20-9
EC no. 201-185-2

Occupational Exposure Standards (OESs) / EH40

Methyl acetate
TWA 616 mg/m³ 200 ml/m³
STEL 770 mg/m³ 250 ml/m³

PROPAN-2-OL

CAS no. 67-63-0
EC no. 200-661-7

Occupational Exposure Standards (OESs) / EH40

Propan-2-ol
TWA 999 mg/m³ 400 ml/m³
STEL 1250 mg/m³ 500 ml/m³

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Personal protective equipment**Respiratory protection**

If workplace exposure limits are exceeded, a respirations protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. Short term: filter apparatus, Filter A/P

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Eye protection

Safety glasses with side protection shield (EN 166)

Skin protection

Clothing as usual in the chemical industry.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Wash hands before breaks and after work. Do not inhale vapours.

9.) Physical and chemical properties**General information**

Form	liquid, clear
Colour	colourless
Odour	characteristic

Important health, safety and environmental information**Changes in physical state**

Type	Boiling range		
Value	68	- 102	°C

Flash point

Value	<	0	°C
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Density

Value		0,717	g/cm ³
Reference temperature	20	°C	

Viscosity

Type	dynamic		
Value		0,71	mPa*s
Reference temperature	20	°C	

Solubility in water

Remarks	partially miscible
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10.) Stability and reactivity**Materials to avoid**

Oxidizing agents; Acids

Hazardous decomposition products

No hazardous decomposition products known.

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11.) Toxicological information

Acute toxicity

Acute oral toxicity

LD50	>	2000	mg/kg
Species	rat		
Reference substance	Heptane		
LD50		4570	mg/kg
Species	rat		
Reference substance	2-propanol		

Acute dermal toxicity

LD50	>	2000	mg/kg
Species	rabbit		
Reference substance	Heptane		
LD50		13400	mg/kg
Species	rabbit		
Reference substance	2-propanol		

Acute inhalational toxicity

LC50	>	5	mg/l
Reference substance	Heptane		
Duration of exposure	4	h	
Species	rat		
LC50		30	mg/l
Reference substance	2-propanol		
Duration of exposure	4	h	
Species	rat		

Experience in practice

Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin.

Eye contact with the product may lead to irritation.

Inhalation may lead to irritation of the respiratory tract.

Inhalation of solvent vapours in higher concentration may lead to nausea, headache, drowsiness and dizziness.

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

12.) Ecological information

General information / ecology

Do not discharge into the drains or waters and do not store on public depositories.

13.) Disposal considerations

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

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14.) Transport information

Land transport ADR/RID

Class	3	Classification code	F1
Packaging group	II		
Hazard id. no.	33		
Label	3		
UN number	1993		
Technical name	Flammable liquid n.o.s.		
Special Provision 640	D		
Danger releasing substance	HEPTANE		
	PROPAN-2-OL		

Marine transport IMDG/GGVSee

Class	3
Packaging group	II
UN number	1993
Proper shipping name	Flammable liquid, n.o.s.
Danger releasing substance	HEPTANE
	PROPAN-2-OL
EmS	F-E, S-E
MARPOL	--
Label	3

Air transport ICAO/IATA

Class	3
Packaging group	II
UN number	1993
Proper shipping name	Flammable liquid, n.o.s.
Danger releasing substance	HEPTANE
	PROPAN-2-OL
Label	3

15.) Regulatory information

Labelling in accordance with EC directives

The product is classified and labelled in accordance with EC Directive 1999/45/EC.

Hazard symbols

F	Highly flammable
Xn	Harmful
N	Dangerous for the environment

R phrases

11	Highly flammable.
36/38	Irritating to eyes and skin.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
67	Vapours may cause drowsiness and dizziness.

S phrases

9	Keep container in a well-ventilated place.
16	Keep away from sources of ignition --- No smoking.
29	Do not empty into drains.
33	Take precautionary measures against static discharges.
60	This material and its container must be disposed of as hazardous waste.
61	Avoid release to the environment. Refer to special instructions/Safety data sheets.
62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks

Annex I, part 2, category 7 b

National regulations**Other regulations, restrictions and prohibition regulations**

VOC

100

%

16.) Other information**Relevant R-phrases (chapter 2):**

- | | |
|-------|--|
| 11 | Highly flammable. |
| 36 | Irritating to eyes. |
| 38 | Irritating to skin. |
| 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 65 | Harmful: may cause lung damage if swallowed. |
| 66 | Repeated exposure may cause skin dryness or cracking. |
| 67 | Vapours may cause drowsiness and dizziness. |

Department issuing safety data sheet

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This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.