

# Material Safety Data Sheet

according to Regulation (EC) 1907/2006

Product name : B 40 Quick-Acting Disinfectant  
Revision : 12.01.2010      Version : 5.0.0  
Print date : 12.01.2010

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## 01. Identification of the substance/preparation and of the company/undertaking

**Product name :** oro<sup>®</sup> Hygienesystem B 40 Quick-Acting Disinfectant  
**Use of the substance / preparation :** B 40 is an aldehyde-free ready-to-use solution for fast-acting alcoholic spray and wipe disinfection as well as for cleaning the surfaces of medical devices.  
**Manufacturer/Supplier :** orochemie GmbH + Co. KG  
**Street/P.O.Box :** Max-Planck-Straße 27  
**Country code/Postal code/Town/City :** 70806 Kornwestheim  
**Telephone :** +49 7154 1308-0  
**Telefax :** +49 7154 1308-40  
**Emergency information :** +49 7154 1308-0

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## 02. Hazards identification

### Hazard designation

Flammable. · Vapours may cause drowsiness and dizziness.  
Classification : R 10 · R 67

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## 03. Composition/information on ingredients

### Chemical characterization

B 40 contains alcohols and auxiliary agents in aqueous solution.

### Hazardous components

N-PROPANOL ; EC-No. : 200-746-9; CAS-No. : 71-23-8

Percentage : 30 - 35 %

Classification : F ; R 11 Xi ; R 41 R 67

ETHANOL ; EC-No. : 200-578-6; CAS-No. : 64-17-5

Percentage : 25 - 30 %

Classification : F ; R 11

For the wording of the listed risk phrases refer to section 16.

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## 04. First-aid measures

### General

No particular measures required.

### After inhalation

Let in fresh air. Call a doctor, should the air passages be affected.

### After skin contact

Flush with water.

### After eye contact

Flush with plenty of water (10 - 15 min.). Contact a doctor immediately.

### After ingestion

Drink plenty of water. Do not induce vomiting. Contact a doctor immediately.

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## 05. Fire-fighting measures

### Suitable extinguishing media

Carbon dioxide. Extinguishing powder. Water haze.

### Unsuitable extinguishing media

Waterjet.

### Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged

None known.

### Special protective equipment

When extinguishing fires, use breathing apparatus with an independent source of air.

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### Additional information

Cool endangered containers with water in case of fire.

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## 06. Accidental release measures

### Personal precautions

Wear suitable protective clothing, gloves and eye/face protection. Keep away from ignition sources - No smoking.

### Environmental precautions

Prevent from flowing into surface water/ground water.

### Methods for cleaning up/collecting

Take up with a liquid absorbing material and proceed according to the waste disposal regulations.

### Additional information

Remove according to regulations.

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## 07. Handling and storage

### Information for safe handling

Containers to be opened and handled with care. Keep away from ignition sources and provide for good ventilation.

### Information about protection against explosions and fires

Keep away from ignition sources - No smoking.

### Requirements to be met by storerooms and containers

Keep only in the original container. Keep in a cool place. Do not store in temperatures below 5 °C. Keep container tightly closed.

### Information about separation of incompatible products

Store the foodstuffs separately. Do not store together with oxidizing, self-igniting substances and highly flammable solid substances.

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## 08. Exposure controls/personal protection

### Additional information about engineering measures

No particular measures required.

### Components with critical values that require monitoring at the workplace (exposure limits)

N-PROPANOL ; CAS-No. : 71-23-8

Specification : Limit value (8 hours) ( GB )  
Value : 200 ppm / 500 mg/m<sup>3</sup>

ETHANOL ; CAS-No. : 64-17-5

Specification : Limit value (8 hours) ( GB )  
Value : 1000 ppm / 1920 mg/m<sup>3</sup>  
Specification : Limit value (8 hours) ( GLOB )  
Value : 500 ppm / 960 mg/m<sup>3</sup>

### Personal protective equipment

Do not eat or drink during work - no smoking. Keep away from food, drink and animal feeding stuff. Avoid contact with skin and eyes.

### Respiratory protection

No particular measures required.

### Hand protection

Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm.

Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm.

### Eye protection

Use tightly fitting safety glasses.

### Body protection

No particular measures required.

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## 09. Physical and chemical properties

### Image

Form : Liquid.

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Colour : Colourless.  
Odour : Mild aromatic. Like alcohol.

### Relevant safety data

Melting point / range :	( 1013 hPa )	no data available		
Boiling point / range :	( 1013 hPa )	no data available		
Flash point :		25 °C		DIN 51755
Ignition temperature :		360 °C		
Lower explosion limit :		2,1 % b.v.		
Upper explosion limit :		15 % b.v.		
Vapour pressure :	( 50 °C )	ca.	150 hPa	
Density :	( 20 °C )		0,87 - 0,91 g/cm <sup>3</sup>	
Solvent-separation test :	( 20 °C )	<	3 %	
Solubility in water :	( 20 °C )		100 % b.w.	
pH value :			6 - 7	
Flow time :	( 20 °C )	<	20 s	DIN-cup 4 mm

## 10. Stability and reactivity

### Conditions to avoid

None, if handled according to order.

### Materials to avoid

None known.

### Hazardous decomposition products

None known.

## 11. Toxicological information

### Toxicological tests

#### LD50/LC50 values that are relevant for classification

Specification :	LD-50
Routes of entry :	oral
Test species :	Rat
Value / dosage :	> 2000 mg/kg
Specification :	LD-50
Routes of entry :	skin
Test species :	Rat
Value / dosage :	> 2000 mg/kg

Testing method : OECD 401. OECD 402.

#### Primary irritant effect

In vitro skin corrosion: non-irritant. Testing method: OECD 431. Rabbit's eye: no irritation. Testing method : OECD 405.

#### Sensitization

Guinea-pig: non-sensitizing. Testing method: OECD 406.

### Experience on practice

The product does not have any skin irritating or sensitizing properties. There is no inhalation risk under normal application conditions.

### Additional toxicological information

The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (1999/45/EC) as well as to our own test reports.

## 12. Ecological information

### Details on elimination (persistence / degradability)

#### Abiotoxic elimination

No data available.

#### Biological degradation / elimination

The product is easily biodegradable according to OECD criteria. Testing method : OECD 301 D.

### Fate in environmental compartments

There are no data available on the preparation itself.

### Ecotoxic effects

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### Performance in sewage-treatment plants

In case of appropriate conduction into adapted biological purification plants no disturbances have to be expected.

### Other information

Ethanol: fish toxicity LC50 > 1000 mg/l (Leuciscus idus, 48 h); harmfulness limit for small crustaceans EC50 > 100 mg/l (Daphnia magna, 48 h).  
1-Propanol: fish toxicity LC50 > 4000 mg/l (Leuciscus idus, 48 h); harmfulness limit for small crustaceans EC50 = 3642 mg/l (Daphnia magna, 48 h).

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## 13. Disposal considerations

### Product

Concentrate/larger quantities: EWC 07 06 99 Waste, n.o.s. (disinfectant). Disposal in conformity with authority regulations.

### Contaminated packaging

Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner as the medium.

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## 14. Transport information

### Land transport ADR/RID

#### Classification

Class : 3      Kemlercode : 30  
UN number : 1987      Classification-Code : F1

LQ 7 · E 1 · Tunnel restriction code : D/E

#### Proper shipping name

ALCOHOLS, N.O.S.

#### Hazardous components

N-PROPANOL · ETHANOL

#### Packaging

Packaging group : III  
Label : 3

### Maritime transport IMDG/GGVSea

#### Classification

IMDG-Code : 3      EmS number : F-E / S-D  
UN number : 1987      Marine Poll. : -

LQ 5 I · E 1

#### Proper shipping name

ALCOHOLS, N.O.S.

#### Hazardous components

N-PROPANOL · ETHANOL

#### Packaging

Packaging group : III  
Label : 3

### Air transport ICAO-TI and IATA-DGR

#### Classification

Class : 3  
UN number : 1987

E 1

#### Proper shipping name

ALCOHOLS, N.O.S.

#### Hazardous components

N-PROPANOL · ETHANOL

#### Packaging

Packaging group : III  
Label : 3

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## 15. Regulatory information

### Classification according to EC directives

#### R-phrases

10      Flammable.

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67                      Vapours may cause drowsiness and dizziness.  
**S-phrases**  
37                      Wear suitable gloves.  
16                      Keep away from sources of ignition - No smoking.

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### 16. Other information

#### **Processing instructions / technical data sheets**

Please observe the label/directions for use!

#### **Further information**

##### **Relevant changes**

08. Components with critical values that require monitoring at the workplace (exposure limits) · 14. Land transport ADR/RID and GGVS/GGVE · 14. Classification (ADR) · 14. Classification (IMDG) · 14. Air transport ICAO-TI and IATA-DGR · 14. Classification (ICAO)

##### **R-Phrases of components**

11                      Highly flammable.  
41                      Risk of serious damage to eyes.  
67                      Vapours may cause drowsiness and dizziness.

#### **Contact**

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These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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