B. Braun Melsungen AG
Revision date: 16 10 2012

Revision date: 16.10.2012 Revision No: 2,00

Promanum pure 00056-0268

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

### 1.1. Product identifier

Promanum pure

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

#### Use of the substance/mixture

Hand disinfectant

### 1.3. Details of the supplier of the safety data sheet

B. Braun Melsungen AG Carl-Braun-Straße 1 D-34212 Melsungen

B. Braun Medical AG Seesatz 17 CH-6204 Sempach

#### **Responsible Department**

Zentrale Service-Bereiche/Logistik und Supply Chain

Telephone: +49 (0) 5661 / 71-4422

Emergency telephone: +49 (0) 6132 / 84463 (GBK Gefahrgut Buero GmbH, Ingelheim)

Responsible for the safety data sheet: sds@gbk-ingelheim.de

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Indications of danger: F - Highly flammable

R phrases:

Highly flammable.

## **GHS** classification

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Highly flammable liquid and vapour.

Causes serious eye irritation.

#### 2.2. Label elements

Danger symbols: F - Highly flammable



# F - Highly flammable

### R phrases

11 Highly flammable.

# S phrases

Neep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

25 Avoid contact with eyes.

This material and its container must be disposed of in a safe way.

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### 2.2. Label elements (GHS classification)

Signal word: Danger

Pictograms: GHS02-GHS07





#### **Hazard statements**

H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.

#### **Precautionary statements**

P233 Keep container tightly closed.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

#### Additional advice on labelling

Applies for those countries where this product is classified as medicinal product; as ready for use medicinal product, this product is not subject to labelling obligation according to the CE directives in these countries.

### 2.3. Other hazards

Vapours may form explosive mixture with air.

# SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

# **Chemical characterization**

Alcoholic solution

# **Hazardous components**

| EC No            | Chemical name   |   | Quantity |
|------------------|---|---|----------|
| CAS No           | Classification  |   |          |
| Index No         | GHS classification                                    |   |          |
| REACH No         |   |   |          |
| 200-578-6        | Ethanol   |   | < 80 %   |
| 64-17-5          | F - Highly flammable R11                              |   |          |
| 603-002-00-5     | Flam. Liq. 2; H225                                    |   |          |
| 01-2119457610-43 |   |   |          |
| 200-661-7        | Propan-2-ol   |   | < 15 %   |
| 67-63-0          | F - Highly flammable, Xi - Irritant R11-36-67         |   |          |
| 603-117-00-0     | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 | · |          |
| 01-2119455582-50 |   |   |          |

Full text of R and H phrases: see Section 16.

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

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#### After inhalation

Move to fresh air in case of accidental inhalation of vapours.

In the event of symptoms refer for medical treatment.

#### After contact with skin

No specific precautions required.

#### After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If eye irritation persists, consult a specialist.

#### After ingestion

Drink plenty of water.

Do not induce vomiting.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

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

Causes serious eye irritation.

Attention. Beware, danger of aspiration.

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

Treat symptoms.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

### Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO2), water-spray.

#### Extinguishing media which must not be used for safety reasons

Full water jet.

#### 5.2. Special hazards arising from the substance or mixture

Fire may produce:

Carbon monoxide and carbon dioxide.

### 5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Protective suit.

#### **Additional information**

Keep away from sources of ignition - No smoking.

Vapours are heavier than air and spread along ground.

The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

#### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.

Avoid contact with skin, eyes and clothing.

Ensure adequate ventilation.

Keep away sources of ignition.

#### 6.2. Environmental precautions

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

#### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

# 6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal look up chapter 13.

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### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

### Advice on safe handling

Do not breathe vapours or spray mist.

Use only in well-ventilated areas.

Avoid contact with skin, eyes and clothing.

When using, do not eat, drink or smoke.

# Advice on protection against fire and explosion

Keep product and empty container away from heat and sources of ignition.

Do not smoke - volatile.

Take precautionary measures against static discharges.

Do not spray on a naked flame or any other incandescent material.

### 7.2. Conditions for safe storage, including any incompatibilities

# Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.

Pay attention to anti-explosion rules.

### Advice on storage compatibility

Incompatible with:

Oxidizing agents

Alkaline metals and earth alkaline metals.

### Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

# 7.3. Specific end use(s)

Hand disinfectant

### **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

### **Exposure limits (EH40)**

| CAS No  | Substance   | ppm  | mg/m³ | fibres/ml | Category      | Origin |
|---------|-------------|------|-------|-----------|---------------|--------|
| 64-17-5 | Ethanol     | 1000 | 1920  |           | TWA (8 h)     | WEL    |
|         |             | -    | -     |           | STEL (15 min) | WEL    |
| 67-63-0 | Propan-2-ol | 400  | 999   |           | TWA (8 h)     | WEL    |
|         |             | 500  | 1250  |           | STEL (15 min) | WEL    |

#### 8.2. Exposure controls

#### Occupational exposure controls

Ensure adequate ventilation, especially in confined areas.

#### Protective and hygiene measures

Do not breath vapours or spray mist.

When using, do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Avoid contact with eyes.

### Respiratory protection

No personal respiratory protective equipment normally required.

Breathing apparatus in the event of aerosol or mist formation.

### Eye protection

Safety goggles with side protection.

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### Skin protection

Long sleeved clothing.

### **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: Colourless
Odour: Alcoholic

**Test method** 

Changes in the physical state

Boiling point: 80 °C

Flash point: 14 °C DIN 51755

Lower explosion limits: 2 vol. %

Upper explosion limits:

Ignition temperature: > 405 °C
Vapour pressure: 77 hPa

(at 20 °C)

Density (at 20 °C): 0,83 g/cm³
Water solubility: Miscible

(at 20 °C)

Solvent content: < 90 %

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No decomposition if stored and applied as directed.

### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Reactions with oxidizing agents.

Reactions with alkali metals.

Reactions with earth alkali metals.

### 10.4. Conditions to avoid

Vapour/air mixtures are explosive at intensive warming.

Heating can release vapours which can be ignited.

### 10.5. Incompatible materials

oxidizing agents

Alkaline metals and alkaline earth metals.

# 10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

#### **Acute toxicity**

No toxicological data available.

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| CAS No  | Chemical name             |                  |         |   |  |
|---------|---------------------------|------------------|---------|---|--|
|         | Exposure routes           | Method Dose      | Species | h |  |
| 64-17-5 | Ethanol                   |                  |         |   |  |
|         | Acute oral toxicity       | LD50 6200 mg/kg  | Rat     |   |  |
|         | Acute inhalation toxicity | LC50 95,6 mg/l   | Rat     | 4 |  |
| 67-63-0 | Propan-2-ol               |                  |         |   |  |
|         | Acute oral toxicity       | LD50 5050 mg/kg  | Rat     |   |  |
|         | Acute dermal toxicity     | LD50 12800 mg/kg | Rabbit  |   |  |

# Irritation and corrosivity

Skin irritation: Not classified.

Eye irritation: Irritant **Sensitising effects** Not classified.

### Severe effects after repeated or prolonged exposure

STOT - Single exposure: Not classified. STOT - Repeated exposure: Not classified.

Aspiration hazard: Not classified.

### Carcinogenic/mutagenic/toxic effects for reproduction

Carcinogenicity: Not classified.

Mutagenicity: Not classified.

Reproductive toxicity: Not classified.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

#### Empirical data on effects on humans

Inhalation of vapours in high concentration can cause narcotic effects.

Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

Ingestion or inhalation of high concentrations may cause injuries to gastrointestinal tract, liver, kidneys and central nervous system.

Contact with eyes may cause irritation.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecological data are not available.

| CAS No  | Chemical name            |                        |               |    |  |
|---------|--------------------------|------------------------|---------------|----|--|
|         | Aquatic toxicity         | Method Dose            | Species       | h  |  |
| 64-17-5 | Ethanol                  |                        |               |    |  |
|         | Acute fish toxicity      | LC50 8140 mg/l         | Golden orfe   | 96 |  |
|         | Acute crustacea toxicity | EC50 9268 - 14221 mg/l | Daphnia magna | 48 |  |
| 67-63-0 | Propan-2-ol              |                        |               |    |  |
|         | Acute fish toxicity      | LC50 > 1000 mg/l       |               | 96 |  |
|         | Acute crustacea toxicity | EC50 > 1000 mg/l       |               | 48 |  |

### 12.2. Persistence and degradability

Ethanol / Propan-2-ol

Readily biodegradable (to OECD criteria)

# 12.3. Bioaccumulative potential

No data available.

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#### Partition coefficient n-octanol/water

| CAS No  | Chemical name | Log Pow |
|---------|---------------|---------|
| 64-17-5 | Ethanol       | - 0,31  |

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

#### 12.6. Other adverse effects

Low hazard to waters.

#### **Further information**

Ecological injuries are not known or expected under normal use.

Do not flush into surface water or sanitary sewer system.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### Advice on disposal

Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations.

Where possible recycling is preferred to disposal.

#### Waste disposal number of waste from residues/unused products

070704

WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors

Classified as hazardous waste.

# Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

## **SECTION 14: Transport information**

Land transport (ADR/RID)

**14.1. UN number:** UN1987

14.2. UN proper shipping name: ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Classification code: F1

Limited quantity: 1 L / 30 kg

Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)

**14.1. UN number:** UN1987

14.2. UN proper shipping name: ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)

14.3. Transport hazard class(es): 3
14.4. Packing group:

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Hazard label:

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Classification code: F1

Limited quantity: 1 L / 30 kg

Marine transport (IMDG)

**14.1. UN number:** UN1987

14.2. UN proper shipping name: ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Limited quantity: 1 L / 30 kg EmS: F-E, S-D

Air transport (ICAO)

UN/ID number: UN1987

**14.2. UN proper shipping name:** ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol, Solution)

14.3. Transport hazard class(es): 3
14.4. Packing group: ||

Hazard label:



Limited quantity Passenger: Y341 / 1 L

IATA-packing instructions - Passenger:353IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:364IATA-max. quantity - Cargo:60 L

14.5. Environmental hazards

Dangerous for the environment: no

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

The transport takes place only in approved and appropriate packaging.

**SECTION 15: Regulatory information** 

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

EU regulatory information

1999/13/EC (VOC): < 90 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment

restrictions for child bearing mothers and nursing.

Water contaminating class (D): 1 - slightly water contaminating

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#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

### **SECTION 16: Other information**

#### Full text of R phrases referred to under Sections 2 and 3

Highly flammable.Irritating to eyes.

67 Vapours may cause drowsiness and dizziness.

Full text of H statements referred to under Sections 2 and 3

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

#### **Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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