

Promanum pure

Revision date: 20.07.2020

Product code: 00056-0268

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Promanum pure

UFI: 9RFV-U7PS-100C-1TY8

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**Manufacturer**

Company name: B. Braun Medical AG
Street: Seesatz 17
Place: CH-6204 Sempach
Responsible Department: Zentrale
Telephone: +41 (0) 58 / 258 50 00
E-Mail: info.bbmch@bbraun.com
Responsible for the safety data sheet: sds@gbk-ingelheim.de

Supplier

Company name: B. Braun Melsungen AG
Street: Carl-Braun-Straße 1
Place: D-34212 Melsungen
Responsible Department: Zentrale Service-Bereiche / Logistik und Supply Chain
Telephone: +49 (0) 5661 / 71-4422
E-Mail: logistics.service@bbraun.com

1.4. Emergency telephone number:

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

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**Regulation (EC) No. 1272/2008****Signal word:** Danger**Pictograms:****Hazard statements**

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

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapour.
P280 Wear eye protection.

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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.
 P501 Dispose of contents/container to an approved waste disposal plant. .

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. Wear protective gloves/protective clothing/eye protection/face protection (see Section 8) during filling and emptying of large containers (> 1000 ml).

Labelling of packages where the contents do not exceed 125 ml**Signal word:** Danger**Pictograms:****2.3. Other hazards**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
 Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Alcoholic solution

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64-17-5	Ethanol			< 80 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
67-63-0	Propan-2-ol			< 15 %
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Data of item 4 do partly not refer to the use and the regular employing of the product (in this sense consult package leaflet and expert information), but to liberation of major amounts in case of accidents and irregularities.

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

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.

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If eye irritation persists, consult a specialist.

After ingestion

Rinse out mouth and give plenty of water to drink.
Never give anything by mouth to an unconscious person.
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.

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.

Unsuitable extinguishing media

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/ground water.

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 see section 13.

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.

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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.

Hints on joint storage

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/m ³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64-17-5	Ethanol			
	DNEL, acute	inhalation	local	1900 mg/m ³
	DNEL, long-term	oral	systemic	343 mg/kg bw/day
	DNEL, long-term	dermal	systemic	343 mg/kg bw/day
	DNEL, long-term	inhalation	systemic	950 mg/m ³
67-63-0	Propan-2-ol			
	Worker DNEL, long-term	inhalation	systemic	500 mg/m ³
	Worker DNEL, long-term	dermal	systemic	888 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	systemic	89 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	319 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	26 mg/kg bw/day

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PNEC values

CAS No	Substance	
Environmental compartment		Value
64-17-5	Ethanol	
Freshwater		0,96 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg
67-63-0	Propan-2-ol	
Freshwater		140,9 mg/l
Marine water		140,9 mg/l
Freshwater sediment		552 mg/kg
Marine sediment		552 mg/kg
Soil		28 mg/kg

8.2. Exposure controls
Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Data of item 8 do partly not refer to the use and the regular employing of the product (in this sense consult package leaflet and expert information), but to liberation of major amounts in case of accidents and irregularities.

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.

Eye/face protection

Safety goggles with side protection (EN 166).

Hand protection

Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0.7 mm, permeation resistance approx. 480 minutes, i.e. protective glove <Butoject 898> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Respiratory protection

No personal respiratory protective equipment normally required.

Breathing apparatus in the event of aerosol or mist formation.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Alcoholic

Test method

pH-Value: n.d.

Changes in the physical state

Melting point: - 114 °C *)

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Initial boiling point and boiling range:	78 °C *)
Sublimation point:	n.a.
Softening point:	n.d.
Flash point:	14 °C DIN 51755
Sustaining combustion:	Sustaining combustion

Flammability

Solid:	n.a.
Gas:	n.a.

Explosive properties

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits:	3,5 vol. % *)
Upper explosion limits:	15 vol. % *)
Ignition temperature:	425 °C *)

Auto-ignition temperature

Solid:	n.a.
Gas:	n.a.

Decomposition temperature:	> 700 °C *)
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Oxidizing properties

Not oxidising.

Vapour pressure: (at 20 °C)	59 hPa *)
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Density (at 20 °C):	0,82 - 0,84 g/cm ³
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Bulk density:	n.a.
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Water solubility: (at 20 °C)	Miscible
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Solubility in other solvents

n.d.

Partition coefficient:	Log Pow: - 0,3 *)
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Viscosity / dynamic:	n.d.
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Viscosity / kinematic:	n.d.
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Flow time:	n.d.
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Vapour density:	n.d.
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Evaporation rate:	n.d.
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Solvent separation test:	n.d.
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Solvent content:	< 95 %
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9.2. Other information

No data available

*) Ethanol

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.

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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

No hazardous decomposition products known.
Fire may produce:
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.
No toxicological data available.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64-17-5	Ethanol				
	oral	LD50 mg/kg 10470	Rat		
	dermal	LD50 mg/kg 15800	Rabbit		
	inhalation (4 h) vapour	LC50 30 mg/l	Rat		
67-63-0	Propan-2-ol				
	oral	LD50 mg/kg 5840	Rat		OECD 401
	dermal	LD50 mg/kg 13900	Rabbit		OECD 402
	inhalation (4 h) vapour	LC50 > 25 mg/l			OECD 403

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

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

Practical experience**Other observations**

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.
Inhalation of vapours in high concentration can cause narcotic effects.
Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance. Swallowing renders

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reabsorption possible.

SECTION 12: Ecological information**12.1. Toxicity**

Ecological data are not available.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-17-5	Ethanol					
	Acute fish toxicity	LC50 mg/l	11200	96 h	Fish	
	Acute algae toxicity	ErC50	275 mg/l		Algae	
	Acute crustacea toxicity	EC50 mg/l	5012	48 h	Daphnia magna	
67-63-0	Propan-2-ol					
	Acute fish toxicity	LC50 mg/l	9640	96 h	Pimephales promelas	
	Acute algae toxicity	ErC50 mg/l	1800	72 h	Desmodesmus subspicatus	IUCLID
	Acute crustacea toxicity	EC50 mg/l	10000	48 h	Daphnia magna	

12.2. Persistence and degradability

Ethanol / Propan-2-ol

Readily biodegradable (to OECD criteria).

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
67-63-0	Propan-2-ol			
	OECD 301E	95 %	21	
	Readily biodegradable.			

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	Ethanol	- 0,3
67-63-0	Propan-2-ol	0,05

BCF

CAS No	Chemical name	BCF	Species	Source
64-17-5	Ethanol	0,66		

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

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13.1. Waste treatment methods**Disposal recommendations**

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

List of Wastes Code - residues/unused products

070604 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; other organic solvents, washing liquids and mother liquors; 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:**

UN 1987

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:

II

Hazard label:

3



Classification code:

F1

Limited quantity:

1 L / 30 kg

Excepted quantity:

E2

Transport category:

2

Hazard No:

33

Tunnel restriction code:

D/E

Inland waterways transport (ADN)**14.1. UN number:**

UN 1987

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:

II

Hazard label:

3



Classification code:

F1

Limited quantity:

1 L / 30 kg

Excepted quantity:

E2

Marine transport (IMDG)**14.1. UN number:**

UN 1987

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:

II

Hazard label:

3



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Marine pollutant:	No
Limited quantity:	1 L / 30 kg
Excepted quantity:	E2
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1987
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:	II
Hazard label:	3



Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: 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 Marpol 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**

2004/42/EC (VOC):	< 95 %
Information according to 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
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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**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 intérieur
 IMDG = International Maritime Code for Dangerous Goods
 IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
 MARPOL = International Convention for the Prevention of Pollution from Ships
 IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

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GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
 CAS = Chemical Abstract Service
 EN = European norm
 ISO = International Organization for Standardization
 DIN = Deutsche Industrie Norm
 PBT = Persistent Bioaccumulative and Toxic
 vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

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.'