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

1.1. Product identifier

Softa-Man acute

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: Xi - Irritant R phrases: Flammable. Risk of serious damage to eyes. Vapours may cause drowsiness and dizziness.

GHS classification

Hazard categories: Flammable liquid: Flam. Liq. 2 Serious eye damage/eye irritation: Eye Dam. 1 Specific target organ toxicity - single exposure: STOT SE 3 Hazard Statements: Highly flammable liquid and vapour. Causes serious eye damage. May cause drowsiness or dizziness.

2.2. Label elements

Danger symbols:

Xi - Irritant



Xi - Irritant

Flammable.

Hazardous components which must be listed on the label Propan-1-ol

R phrases

1()		

16 Keep away from sources of ignition - No smoking.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

- 35 This material and its container must be disposed of in a safe way.
- 39 Wear eye/face protection.

2.2. Label elements (GHS classification)



Propan-1-ol

Hazard statements

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces No smoking.
Do not breathe vapour.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

Additional advice on labelling

Applies for those countries where this product is classified as medicinal product or cosmetic; as ready for use medicinal product or cosmetic, 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	< 55 %
64-17-5	F - Highly flammable R11	
603-002-00-5	Flam. Liq. 2; H225	
01-2119457610-43		
200-746-9	Propan-1-ol	< 25 %
71-23-8	F - Highly flammable, Xi - Irritant R11-41-67	
603-003-00-0	Flam. Liq. 2, Eye Dam. 1, STOT SE 3; H225 H318 H336	
01-2119486761-29		
201-159-0	Butanone	< 5 %
78-93-3	F - Highly flammable, Xi - Irritant R11-36-66-67	
606-002-00-3	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	
02-2119752535-35		

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.

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 eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye 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 damage. May cause drowsiness or dizziness. 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

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation. When using, do not eat, drink or smoke. Avoid contact with eyes.

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.

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
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
71-23-8	Propan-1-ol	200	500		TWA (8 h)	WEL
		250	625		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift

8.2. Exposure controls

Occupational exposure controls Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Do not inhale vapours. When using, do not eat, drink or smoke. Avoid contact with the eyes. Remove and wash contaminated clothing before re-use. **Respiratory protection** No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A). **Eye protection**

Safety goggles with side protection. Eye wash bottle with pure water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Alcoholic

Changes in the physical state

onanges in the physical state	
Boiling point:	84 °C
Flash point:	21 °C DIN 51755
Lower explosion limits:	2,1 *)
Upper explosion limits:	*)
Ignition temperature:	360 °C *)
Vapour pressure: (at 20 °C)	59 hPa **)
Density (at 20 °C):	0,86 g/cm³
Water solubility: (at 20 °C)	Miscible
Solvent content:	< 75 %

Test method

9.2. Other information

*) Propan-1-ol **) 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.

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.

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

Irritation and corrosivity

Skin irritation: Not classified.

Eye irritation: Causes serious eye damage. **Sensitising effects**

Not classified.

Severe effects after repeated or prolonged exposure

STOT - Single exposure: Category 3 [May cause drowsiness or dizziness.]

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

Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance. Swallowing renders reabsorption possible.

Further information

If appropriately handled and if in accordance with the general hygienic rules, no damages to health have become known.

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

12.2. Persistence and degradability

Ethanol / Propan-1-ol

Readily biodegradable (to OECD criteria)

12.3. Bioaccumulative potential

No data available.

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.

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

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

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 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)	
<u>14.1. UN number:</u>	UN1987
14.2. UN proper shipping name:	ALCOHOLS, N.O.S. (Ethanol, Propan-1-ol)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Limited quantity: Transport category:	1 L / 30 kg 2
Hazard No:	33
Tunnel restriction code:	D/E
Inland waterways transport (ADN)	
<u>14.1. UN number:</u>	UN1987
14.2. UN proper shipping name:	ALCOHOLS, N.O.S. (Ethanol, Propan-1-ol)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code: Limited quantity:	F1 1 L / 30 kg
Marine transport (IMDG)	1 L / 30 Kg
	UN1987
<u>14.1. UN number:</u> 14.2. UN proper shipping name:	ALCOHOLS, N.O.S. (Ethanol, Propan-1-ol)
14.3. Transport hazard class(es):	3
14.4. Packing group:	а П
Hazard label:	3
Limited quantity: EmS:	1 L / 30 kg F-E, S-D
Air transport (ICAO)	
UN/ID number:	UN1987
14.2. UN proper shipping name:	ALCOHOLS, N.O.S. (Ethanol, Propan-1-ol, Solution)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Limited quantity Passenger:	Y341 / 1 L

Safety Data Sheet according to Regulation (EC) No 1907/2006		
B. Braun Melsungen AG		
Revision date: 27.03.2013	Revision No: 1,11	
Softa-Man acute		
00056-0230		
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		
Dangerous for the environment:	no	
14.6. Special precautions for user		
Handle in accordance with good industrial hy	giene 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.		
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture		
EU regulatory information		
1999/13/EC (VOC):	< 75 %	
National regulatory information		
	Observe employment restrictions for young people. Observe employment	
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	
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		
10 Flammable.		
11 Highly flammable.		
36 Irritating to eyes.		
41 Risk of serious damage to eyes.		
66 Repeated exposure may cause skin dryness or cracking.		
67 Vapours may cause drowsiness and dizziness.		
Full text of H statements referred to under Sections 2 and 3		
	3 7 1 1 1 1 1 1 1	
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	ne corresponding product sheet.	
This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty		

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.)