

Safety Data Sheet according to Regulation (EC) No 1907/2006

B. Braun Melsungen AG

Revision date: 03.12.2012

Revision No: 1,00

Melsept SF

00056-0008

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

1.1. Product identifier

Melsept SF

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

Use of the substance/mixture

Disinfectant for surfaces

1.3. Details of the supplier of the safety data sheet

B. Braun Melsungen AG

Carl-Braun-Straße 1

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B. Braun Medical AG

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CH-6204 Sempach

Responsible Department

Zentrale Service-Bereiche/Logistik und Supply Chain

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: Corrosive, Harmful, Irritant

R phrases:

Harmful by inhalation and if swallowed.

Causes burns.

Irritating to respiratory system.

May cause sensitisation by inhalation and skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Possible risks of irreversible effects.

GHS classification

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory/skin sensitization: Resp. Sens. 1

Respiratory/skin sensitization: Skin Sens. 1

Germ cell mutagenicity: Muta. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Harmful if swallowed or if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled .

May cause respiratory irritation.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Very toxic to aquatic life with long lasting effects .

2.2. Label elements

Danger symbols:

C - Corrosive



C - Corrosive

Hazardous components which must be listed on the label

Alcohol ethoxylate

Didecyldimethylammonium chloride

Glutaraldehyde

Glyoxal

R phrases

20/22 Harmful by inhalation and if swallowed.

34 Causes burns.

37 Irritating to respiratory system.

42/43 May cause sensitisation by inhalation and skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

68 Possible risks of irreversible effects.

S phrases

23 Do not breathe vapour.

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.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.2. Label elements (GHS classification)

Signal word:

Danger

Pictograms:

GHS05-GHS07-GHS08-GHS09



Hazardous components which must be listed on the label

Alcohol ethoxylate

Didecyldimethylammonium chloride

Glutaraldehyde

Glyoxal

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P260 Do not breathe vapour.

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

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

easy to do. Continue rinsing.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

2.3. Other hazards

Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Concentrate with aldehyds and and quaternary ammonium compounds

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
*	Alcohol ethoxylate	5 - 15 %
	Xn - Harmful, Xi - Irritant R22-41	
	Acute Tox. 4, Eye Dam. 1; H302 H318	
230-525-2	Didecyltrimethylammonium chloride	7,5 %
7173-51-5	C - Corrosive, Xn - Harmful, N - Dangerous for the environment R22-34-50	
	Acute Tox. 4, Skin Corr. 1B, Aquatic Acute 1; H302 H314 H400	
200-661-7	Propan-2-ol	< 5 %
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		
203-856-5	Glutaraldehyde	4,5 %
111-30-8	T - Toxic, C - Corrosive, N - Dangerous for the environment R23/25-34-42/43-50	
605-022-00-X	Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Resp. Sens. 1, Skin Sens. 1, Aquatic Acute 1; H331 H301 H314 H334 H317 H400	
203-474-9	Glyoxal	3,2 %
107-22-2	Muta. Cat. 3, Xn - Harmful, Xi - Irritant R68-20-36/38-43	
605-016-00-7	Muta. 2, Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H341 H332 H319 H315 H317	
227-813-5	(R)-p-Mentha-1,8-diene	< 1 %
5989-27-5	Xi - Irritant, N - Dangerous for the environment R10-38-43-50-53	
601-029-00-7	Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H226 H315 H317 H400 H410	

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

Further Information

* Polymer

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 skin

Wash off immediately with soap and plenty of water.
Treat subsequently with skin cream.
Consult a physician.

After contact with eyes

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

After ingestion

Drink plenty of water.
Summon a doctor immediately.
Induce vomiting only upon the advice of a physician.

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

Harmful by inhalation and if swallowed.
May cause respiratory irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Causes severe skin burns and eye damage
Suspected of causing genetic defects.

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

Product does not burn, fire-extinguishing activities according to surrounding.

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.
Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.
Protective suit.

Additional information

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.
Use personal protective clothing.

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

Keep container tightly closed.

Keep a good ventilation and air-exhaust at the place of work.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a dry, well-ventilated place.

Advice on storage compatibility

Incompatible with strong acids and oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Disinfectant for surfaces

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
111-30-8	Glutaraldehyde	0.05	0.2		TWA (8 h)	WEL
		0.05	0.2		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 inhale vapours.

Wash hands before breaks and immediately after handling the product.

When using, do not eat, drink or smoke.

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothes before re-use.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A).

Hand protection

Protective gloves resistant to chemicals made off nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 240 minutes, i.e. protective glove <Camatril Velours 730> 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.

Eye protection

Eye wash bottle with pure water.

Safety goggles with side protection.

Skin protection

Long sleeved clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Blue
Odour:	Aldehyde-like

Test method

pH-Value:	3,5
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Changes in the physical state

Boiling point:	Approx. 100 °C
Flash point:	n.a.
Lower explosion limits:	n.a.
Upper explosion limits:	
Ignition temperature:	n.a.
Density (at 20 °C):	1,02 g/cm ³
Water solubility: (at 20 °C)	Miscible
Viscosity / dynamic:	Approx. 20 mPa·s

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 acids and strong oxidizing agents.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Strong acids and oxidizing agents.

10.6. Hazardous decomposition products

Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).
Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No toxicological data available.

Harmful by inhalation and if swallowed.

CAS No	Chemical name			
	Exposure routes	Method	Dose	Species
	Alcohol ethoxylate			
	Acute oral toxicity	ATE	500 mg/kg	
7173-51-5	Didecyldimethylammonium chloride			
	Acute oral toxicity	LD50	238 mg/kg	Rat
	Acute dermal toxicity	LD50	3342 mg/kg	Rabbit
67-63-0	Propan-2-ol			
	Acute oral toxicity	LD50	5050 mg/kg	Rat
	Acute dermal toxicity	LD50	12800 mg/kg	Rabbit
111-30-8	Glutaraldehyde			
	Acute oral toxicity	ATE	100 mg/kg	
	Acute inhalation toxicity	ATE	0,5 mg/l	
107-22-2	Glyoxal			
	Acute dermal toxicity	LD50	12700 mg/kg	Kaninchen
	Acute inhalation toxicity	ATE	1,5 mg/l	
5989-27-5	(R)-p-Mentha-1,8-diene			
	Acute oral toxicity	LD50	> 2000 mg/kg	Ratte
	Acute dermal toxicity	LD50	> 2000 mg/kg	Kaninchen

Irritation and corrosivity

Causes severe skin burns and eye damage

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Severe effects after repeated or prolonged exposure

STOT/Single exposure: Category 3 [May cause respiratory irritation.]

STOT/Repeated exposure: Not classified.

Aspiration hazard: Not classified.

Carcinogenic/mutagenic/toxic effects for reproduction

Carcinogenicity: Not classified.

Mutagenicity: Category 3 [Suspected of causing genetic defects.]

Teratogenicity: 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 may cause irritation of respiratory system.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

Very toxic to aquatic life with long lasting effects.

Didecyldimethylammonium chloride [M = 10]

CAS No	Chemical name				
	Aquatic toxicity	Method	Dose	Species	h
7173-51-5	Didecyldimethylammonium chloride				
	Acute fish toxicity	LC50	0,19 mg/l	Pimephales promelas	96
	Acute algae toxicity	ErC50	0,026 mg/l	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	0,062 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
107-22-2	Glyoxal				
	Acute fish toxicity	LC50	215 mg/l	Fisch	96
5989-27-5	(R)-p-Mentha-1,8-diene				
	Acute fish toxicity	LC50	0,7 mg/l	Pimephales promelas	96
	Acute crustacea toxicity	EC50	0,42 mg/l	Daphnia magna	48

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
5989-27-5	(R)-p-Mentha-1,8-diene	4,23

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Hazardous water pollutant.

Due to dilution in sewage the concentration will rapidly remain under 0,05% for fungistasis and 0,075% for bacteriostasis.

The critical concentration according to Formazan-Test is 0,07.

For that reason a solution of the product can be given into a purification plant without problems.

Further information

Product is not allowed to be discharged into aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

Waste disposal number of waste from residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

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: UN1903
14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Glutaraldehyde, Didecyldimethylammonium chloride)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C9
Limited quantity: 5 L / 30 kg
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN1903
14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Glutaraldehyde, Didecyldimethylammonium chloride)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C9
Limited quantity: 5 L / 30 kg

Marine transport (IMDG)

14.1. UN number: UN1903
14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Glutaraldehyde, Didecyldimethylammonium chloride)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Limited quantity: 5 L / 30 kg
EmS: F-A, S-B

Air transport (ICAO)

UN/ID number: UN1903
14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Glutaraldehyde, Didecyldimethylammonium chloride, Solution)
14.3. Transport hazard class(es): 8
14.4. Packing group: III

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Hazard label:

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Limited quantity Passenger:	Y841 / 1 L
IATA-packing instructions - Passenger:	852
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	856
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

Dangerous for the environment: yes



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): < 15 %

National regulatory information

Employment restrictions:	Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.
Water contaminating class (D):	2 - water contaminating

Additional information

Chemical prohibition regulation consider.

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.
20	Harmful by inhalation.
20/22	Harmful by inhalation and if swallowed.
22	Harmful if swallowed.
23/25	Toxic by inhalation and if swallowed.
34	Causes burns.
36	Irritating to eyes.
36/38	Irritating to eyes and skin.
37	Irritating to respiratory system.
38	Irritating to skin.
41	Risk of serious damage to eyes.
42/43	May cause sensitisation by inhalation and skin contact.
43	May cause sensitisation by skin contact.
50	Very toxic to aquatic organisms.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53	May cause long-term adverse effects in the aquatic environment.

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67 Vapours may cause drowsiness and dizziness.

68 Possible risks of irreversible effects.

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

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H341 Suspected of causing genetic defects.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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.)