# Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Product name : SEKUMATIC FD

Product code : 103189E

Use of the : Instrument Disinfectant

Substance/Mixture

Substance type: : Mixture

For professional users only.

Product dilution information : No dilution information provided.

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

Identified uses : Medical devices . Semi-automatic process

Recommended restrictions : Reserved for i

on use

number

: Reserved for industrial and professional use.

# 1.3 Details of the supplier of the safety data sheet

Company : Ecolab Ltd.

PO Box 11; Winnington Avenue

Northwich, Cheshire, United Kingdom CW8 4DX

+ 44 (0)1606 74488 ccs@ecolab.com

#### 1.4 Emergency telephone number

Emergency telephone : Food & Beverage, Institutional, Agriculture, Textile Hygiene:

Northwich: +44 (0)1606 74488

Healthcare Leeds: +44 (0)113 232 2480 Healthcare Swansea: +44 (0)1235 239670

Poison Information Centre

telephone number

: Not Available

Date of Compilation/Revision : 27.07.2016

version : 1.0

# Section: 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

# Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302
Acute toxicity, Category 4 H332
Skin corrosion, Category 1B H314
Serious eye damage, Category 1 H318

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Respiratory sensitization, Category 1 H334
Skin sensitization, Category 1 H317
Specific target organ toxicity - single exposure, Category 3, H335

Respiratory system

#### 2.2 Label elements

# Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms







Signal Word : Danger

Hazard Statements : H302 + H332 Harmful if swallowed or if inhaled

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or

breathing difficulties if inhaled.
H335 May cause respiratory irritation.

Precautionary Statements : **Prevention:** 

P280 Wear protective gloves/ eye protection/ face

protection.

P284 Wear respiratory protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

all contaminated clothing. Rinse skin with

water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and

keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water

for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label: glutaraldehyde methanol

#### 2.3 Other hazards

None known.

# Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

# **Hazardous components**

Chemical Name	CAS-No. EC-No.	ClassificationREGULATION (EC) No 1272/2008	Concentration:
	REACH No.		

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glutaraldehyde	111-30-8 203-856-5 01-2119455549-26	Acute toxicity Category 3; H301 Acute toxicity Category 3; H331 Skin corrosion Category 1B; H314 Respiratory sensitization Category 1; H334 Skin sensitization Category 1; H317 Acute aquatic toxicity Category 1; H400	>= 20 - < 25		
methanol	67-56-1 200-659-6 01-2119433307-44	** Flammable liquids Category 2; H225 Acute toxicity Category 3; H301 Acute toxicity Category 3; H331 Acute toxicity Category 3; H311 Specific target organ toxicity - single exposure Category 1; H370	>= 0.1 - < 0.25		
Substances with a workplace exposure limit :					
ethanol	64-17-5 200-578-6 01-2119457610-43	Flammable liquids Category 2; H225	>= 5 - < 10		

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **Section: 4. FIRST AID MEASURES**

#### 4.1 Description of first aid measures

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for

at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.

Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention

immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give

anything by mouth to an unconscious person. Get medical

attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.

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

See Section 11 for more detailed information on health effects and symptoms.

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

Treatment : Treat symptomatically.

# **Section: 5. FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: None known.

# 5.2 Special hazards arising from the substance or mixture

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Specific hazards during

firefighting

: Fire Hazard

Keep away from heat and sources of ignition. Flash back possible over considerable distance.

Beware of vapours accumulating to form explosive concentrations.

Vapours can accumulate in low areas.

Hazardous combustion

products

: Decomposition products may include the following materials:

Carbon oxides

nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

#### 5.3 Advice for firefighters

for firefighters

Special protective equipment : Use personal protective equipment.

Further information : Fire residues and contaminated fire extinguishing water must be

disposed of in accordance with local regulations. In the event of

fire and/or explosion do not breathe fumes.

# **Section: 6. ACCIDENTAL RELEASE MEASURES**

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency

personnel

: Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are

facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in

sections 7 and 8.

Advice for emergency

responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable

materials.

#### 6.2 Environmental precautions

: Do not allow contact with soil, surface or ground water. Environmental precautions

#### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Eliminate all ignition sources if safe to do so. Stop leak if safe to

> do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain

material to ensure runoff does not reach a waterway.

#### 6.4 Reference to other sections

See Section 1 for emergency contact information.

For personal protection see section 8.

See Section 13 for additional waste treatment information.

#### Section: 7. HANDLING AND STORAGE

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#### 7.1 Precautions for safe handling

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not

breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Wash

hands thoroughly after handling.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Remove and wash contaminated clothing before re-use.

Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for guick drenching or flushing

of the eyes and body in case of contact or splash hazard.

# 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep away from heat and sources of ignition. Keep away from oxidizing agents. Keep out of reach of children. Keep container

tightly closed. Store in suitable labeled containers.

Storage temperature : 0 °C to 25 °C

7.3 Specific end uses

Specific use(s) : Medical devices . Semi-automatic process

#### Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
glutaraldehyde	111-30-8	TWA	0.05 ppm 0.2 mg/m3	UKCOSSTD
Further information	4 and resp airw som sym who imporesp disti peop inclu	Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. 54 Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified asthmagens or respiratory sensitisers.		
	occu prim becc asth prac rece Hea expo shou	Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance.		

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	Sen 56	Capable of causing occupational asthma. The identified substances are those which: - are assigned the risk phrase 'R42: May cause sensitisation by inhalation'; or 'R42/43: May cause sensitisation by inhalation and skin contact' or - are listed in section C of HSE publication 'Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma' as updated from time to time, or any other substance which the risk assessment has shown to be a potential cause of occupational asthma.  The 'Sen' notation in the list of WELs has been assigned only to those					
		substa	STEL	y cause	occupational asthma. 0.05 ppm 0.2 mg/m3		UKCOSSTD
Further information	53+5	Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyperresponsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. 54 Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified asthmagens or respiratory sensitisers.					
	55	occup primar becom asthm practic receiv Health expos should	ational asthma s y aim is to apply ning hyper-responda, COSHH requited cable. Activities be particular attential surveillance is the documents of the appropriate	should y adequent on sive. It is the giving of the giving	acticable, exposure to so be prevented. Where the uate standards of control. For substances that call at exposure be reduced rise to short-term peak of then risk management is priate for all employees of the may cause occupation litation with an occupation evel of surveillance.	is is not of to prevent cause of as low a concentrate being concentrate as being concentrate as being concentrate as being concentrate as the conc	possible, the ent workers from occupational is is reasonably ations should onsidered. or liable to be ma and there
	Sen 56	Capab which: inhala or - a assess update has sh	ole of causing one - are assigned tion'; or 'R42/43 re listed in section section from time to the event of th	ccupation of the rise on C of the column of the column of the list of the column of the list of the li	onal asthma. The identify k phrase 'R42: May cause sensitisation by in HSE publication 'Asthme for agents implicated in any other substance we cause of occupational as of WELs has been assign.	se sensi halation nagen? (on occupa hich the sthma.	tisation by and skin contact' Critical tional asthma' as risk assessment
ethanol	64-17-5		TWA	y cause	1,000 ppm		UKCOSSTD
Further information	2		 e no specific sho erm exposure sh		1,920 mg/m3 exposure limit is listed,	a figure	three times the
methanol	67-56-1		TWA	iodia b	200 ppm 266 mg/m3		UKCOSSTD
Further information	Sk	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.  STEL  250 ppm  UKCOSSTD  333 mg/m3					
Further information	Sk				in. The assigned substa al absorption will lead to		

# DNEL

DINLL		
methanol	:	End Use: Workers Exposure routes: Dermal Potential health effects: Acute systemic effects Value: 40 mg/cm2
		End Use: Workers

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Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 260 mg/m3
End Use: Workers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 260 mg/m3
End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 40 mg/cm2
End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 260 mg/m3
End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 260 mg/m3
End Use: Consumers Exposure routes: Dermal Potential health effects: Acute systemic effects Value: 8 mg/cm2
End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 50 mg/m3
End Use: Consumers Exposure routes: Ingestion Potential health effects: Acute systemic effects Value: 8 ppm
End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 50 mg/m3
End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 8 mg/cm2
End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 50 mg/m3
End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 8 ppm

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	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 50 mg/m3
--	--

# PNEC

PNEC	
methanol	: Fresh water Value: 154 mg/l
	Marine water Value: 15.4 mg/l
	Intermittent use/release Value: 1540 mg/l
	Sediment Value: 570.4 mg/kg
	Soil Value: 23.5 mg/kg
	Sewage treatment plant Value: 100 mg/l

#### 8.2 Exposure controls

#### Appropriate engineering controls

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations

below occupational exposure standards.

#### Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Remove and wash contaminated clothing before re-use.

Wash face, hands and any exposed skin thoroughly after

handling. Provide suitable facilities for quick drenching or flushing

of the eyes and body in case of contact or splash hazard.

Eye/face protection (EN 166) : Safety goggles

Face-shield

Hand protection (EN 374) : Recommended preventive skin protection

Gloves Nitrile rubber butyl-rubber

Breakthrough time: 1 – 4 hours

Minimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4

mm or equivalent (please refer to the gloves

manufacturer/distributor for advise).

Gloves should be discarded and replaced if there is any indication

of degradation or chemical breakthrough.

Skin and body protection

(EN 14605)

: Personal protective equipment comprising: suitable protective

gloves, safety goggles and protective clothing

Respiratory protection (EN : None required if airborne concentrations are maintained below the

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143, 14387) exposure limit listed in Exposure Limit Information. Use certified

respiratory protection equipment meeting EU

requirements(89/656/EEC, 89/686/EEC), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods

or procedures of work organization.

#### **Environmental exposure controls**

General advice : Consider the provision of containment around storage vessels.

#### Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

**Appearance** : liquid

Colour colourless Odour : Disinfectants pΗ : 3.5, 100 %

Flash point : 55 °C closed cup, Does not sustain combustion.

Odour Threshold : Not applicable and/or not determined for the mixture Melting point/freezing point : Not applicable and/or not determined for the mixture

Initial boiling point and

boiling range

: Not applicable and/or not determined for the mixture

Not applicable and/or not determined for the mixture Evaporation rate Flammability (solid, gas) : Not applicable and/or not determined for the mixture Upper explosion limit Not applicable and/or not determined for the mixture Lower explosion limit Not applicable and/or not determined for the mixture Vapour pressure Not applicable and/or not determined for the mixture

Relative vapour density : Not applicable and/or not determined for the mixture

Relative density : 1.04 : soluble Water solubility

Solubility in other solvents : Not applicable and/or not determined for the mixture Partition coefficient: n-

octanol/water

: Not applicable and/or not determined for the mixture

Auto-ignition temperature

Thermal decomposition

Viscosity, kinematic

: Not applicable and/or not determined for the mixture : Not applicable and/or not determined for the mixture : Not applicable and/or not determined for the mixture

Explosive properties : Not applicable and/or not determined for the mixture : The substance or mixture is not classified as oxidizing. Oxidizing properties

#### 9.2 Other information

Not applicable and/or not determined for the mixture

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# Section: 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4 Conditions to avoid

Heat, flames and sparks.

#### 10.5 Incompatible materials

None known.

#### 10.6 Hazardous decomposition products

Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

#### Section: 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

Information on likely routes of : Inhalation, Eye contact, Skin contact

exposure

**Product** 

Acute oral toxicity : Acute toxicity estimate : 738.92 mg/kg

Acute inhalation toxicity : 4 h Acute toxicity estimate : 2.48 mg/l

Acute dermal toxicity : Acute toxicity estimate : > 2,000 mg/kg

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye

irritation

: There is no data available for this product.

Respiratory or skin

sensitization

: There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

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Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

Components

Acute oral toxicity : glutaraldehyde

LD50 rat: 150 mg/kg

ethanol

LD50 rat: 10,470 mg/kg

Components

Acute inhalation toxicity : glutaraldehyde

4 h LC50 rat: > 0.5 mg/l

ethanol

4 h LC50 rat: 117 mg/l

Components

Acute dermal toxicity : ethanol

LD50 rabbit: > 15,800 mg/kg

**Potential Health Effects** 

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns. May cause allergic skin reaction.

Ingestion : Causes digestive tract burns.

Inhalation : May cause allergic respiratory reaction. May cause respiratory

tract irritation. May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

**Experience with human exposure** 

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Irritation, Corrosion, Allergic reactions

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough, May cause allergy or asthma

symptoms or breathing difficulties if inhaled.

#### Section: 12. ECOLOGICAL INFORMATION

#### 12.1 Ecotoxicity

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**Environmental Effects** : This product has no known ecotoxicological effects.

**Product** 

Toxicity to fish : no data available Toxicity to daphnia and other : no data available

aquatic invertebrates

Toxicity to algae : no data available

Components

Toxicity to fish : methanol

96 h LC50: 15,400 mg/l

ethanol

96 h LC50 Pimephales promelas (fathead minnow): > 100 mg/l

Components

Toxicity to daphnia and other : glutaraldehyde

aquatic invertebrates

48 h EC50 Daphnia: 0.35 mg/l

methanol

48 h EC50: > 10,000 mg/l

Components

Toxicity to algae : methanol

72 h EC50: 22,000 mg/l

#### 12.2 Persistence and degradability

#### **Product**

no data available

Components

: glutaraldehyde Biodegradability

Result: Readily biodegradable.

methanol

Result: Readily biodegradable.

Result: Readily biodegradable.

#### 12.3 Bioaccumulative potential

no data available

# 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

#### **Product**

Assessment : This substance/mixture contains no components considered to be

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either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

no data available

#### Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

#### 13.1 Waste treatment methods

Product : Where possible recycling is preferred to disposal or incineration. If

recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal

facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken

to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local,

state, and federal regulations.

Guidance for Waste Code

selection

: Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC)

and local regulations.

# **Section: 14. TRANSPORT INFORMATION**

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)

14.1 UN number : 3265

14.2 UN proper shipping : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

name

(Glutaraldehyde)

14.3 Transport hazard : 8

class(es)

14.4 Packing group : III14.5 Environmental hazards : No14.6 Special precautions for : None

user

Air transport (IATA)

14.1 UN number : 3265

14.2 UN proper shipping : Corrosive liquid, acidic, organic, n.o.s.

name

(Glutaraldehyde)

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14.3 Transport hazard : 8

class(es)

14.4 Packing group : III14.5 Environmental hazards : No14.6 Special precautions for : None

user

Sea transport (IMDG/IMO)

14.1 UN number : 3265

14.2 UN proper shipping : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

name

(Glutaraldehyde)

14.3 Transport hazard : 8

class(es)

14.4 Packing group : III14.5 Environmental hazards : No14.6 Special precautions for : None

user

14.7 Transport in bulk : Not applicable.

according to Annex II of MARPOL 73/78 and the IBC

Code

#### **Section: 15. REGULATORY INFORMATION**

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

#### **National Regulations**

Take note of Dir 94/33/EC on the protection of young people at work.

Other regulations : The Chemicals (Hazard Information and Packaging for Supply)

Regulations.

The Control of Substances Hazardous to Health Regulations.

Health and Safety at Work Act.

#### 15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

#### **Section: 16. OTHER INFORMATION**

#### **Full text of H-Statements**

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H370	Causes damage to organs.
H400	Very toxic to aquatic life.

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#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS -Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

# **ANNEX: EXPOSURE SCENARIOS**

#### **DPD+ Substances:**

The following substances are the lead substances that contribute to the mixture Exposure Scenario according to the DPD+ Rule:

Route	Substance	CAS-No.	EINECS-No.
-------	-----------	---------	------------

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Respiratory sensitiser	glutaraldehyde	111-30-8	203-856-5
Ingestion	glutaraldehyde	111-30-8	203-856-5
Inhalation	glutaraldehyde	111-30-8	203-856-5
Dermal	glutaraldehyde	111-30-8	203-856-5
Eyes	glutaraldehyde	111-30-8	203-856-5
aquatic environment	glutaraldehyde	111-30-8	203-856-5

To calculate if your downstream Operating Conditions and Risk management Measures are safe, please calculate your risk factor at the website below:

#### www.ecetoc.org/tra

Short title of Exposure

Scenario

: Medical devices . Semi-automatic process

**Use descriptors** 

Main User Groups : Professional uses: Public domain (administration, education,

entertainment, services, craftsmen)

Sectors of end-use : SU22: Professional uses: Public domain (administration,

education, entertainment, services, craftsmen)

Process categories : PROC1: Use in closed process, no likelihood of exposure

**PROC8a:** Transfer of substance or preparation (charging/discharging) from/ to vessels/ large containers at non-dedicated

facilities

Product categories : **PC35:** Washing and cleaning products (including solvent based

products)

Environmental Release

Categories

: **ERC8a**: Wide dispersive indoor use of processing aids in open

systems

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