

Material Safety Data Sheet

according to Regulation (EC) 1907/2006

Product name : A 20 Instrument Disinfection
Revision : 12.01.2010 Version : 4.0.0
Print date : 12.01.2010

01. Identification of the substance/preparation and of the company/undertaking

Product name : oro[®] Hygienesystem A 20 Instrument Disinfection
Use of the substance / preparation : A 20 is an aldehyde-free concentrate for simultaneously disinfecting and cleaning all instruments made of metal, plastic materials, rubber and glass in clinics, surgeries and laboratories.
Manufacturer/Supplier : orochemie GmbH + Co. KG
Street/P.O.Box : Max-Planck-Straße 27
Country code/Postal code/Town/City : 70806 Kornwestheim
Telephone : +49 7154 1308-0
Telefax : +49 7154 1308-40
Emergency information : +49 7154 1308-0

02. Hazards identification

Hazard designation

Very toxic to aquatic organisms. - Danger of serious damage to health by prolonged exposure. - Causes severe burns. - Harmful if swallowed.

Classification : N ; R 50 · Xn ; R 48 · C ; R 35 · Xn ; R 22

03. Composition/information on ingredients

Chemical characterization

A 20 contains alkylamines, quaternary ammonium compounds, non-ionic surfactants, complexing and auxiliary agents in aqueous solution.

Hazardous components

3-AMINOPROPYL-DODECYLPROPANE-DIAMINE ; EC-No. : 219-145-8; CAS-No. : 2372-82-9

Percentage : 15 - 20 %

Classification : N ; R 50 · C ; R 35 · Xn ; R 48/22

ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; EC-No. : 270-325-2; CAS-No. : 68424-85-1

Percentage : 10 - 15 %

Classification : N ; R 50 · C ; R 34 · Xn ; R 22

FATTY ALCOHOL POLYGLYCOL ETHER ; CAS-No. : 97043-91-9

Percentage : 1 - 5 %

Classification : Xi ; R 41 · Xn ; R 22

FATTY ALCOHOL POLYGLYCOL ETHER ; CAS-No. : 26183-52-8

Percentage : 1 - 5 %

Classification : Xi ; R 41

SODIUM ETHYLENEDIAMINETETRAACETATE ; EC-No. : 200-573-9; CAS-No. : 64-02-8

Percentage : 1 - 5 %

Classification : Xi ; R 41 · Xn ; R 22

For the wording of the listed risk phrases refer to section 16.

04. First-aid measures

General

Immediately remove all contaminated clothing.

After inhalation

Let in fresh air. Call a doctor, should the air passages be affected.

After skin contact

Flush with plenty of water.

After eye contact

Flush with plenty of water (10 - 15 min.). Contact a doctor immediately.

After ingestion

Drink plenty of water. Do not induce vomiting. Contact a doctor immediately.

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Colour : Blue.
Odour : Like amine.

Relevant safety data

Melting point / range :	(1013 hPa)	no data available	
Boiling point / range :	(1013 hPa)	ca. 100 °C	
Flash point :		not applicable	DIN 51755
Ignition temperature :		not applicable	
Lower explosion limit :		not applicable	
Upper explosion limit :		not applicable	
Density :	(20 °C)	0,98 - 1,02	g/cm ³
Solubility in water :	(20 °C)	100	% b.w.
pH value :	(20 °C / 20 g/l)	9,7 - 10,7	

10. Stability and reactivity

Conditions to avoid

None, if handled according to order.

Materials to avoid

None known.

Hazardous decomposition products

None known.

11. Toxicological information

Toxicological tests

LD50/LC50 values that are relevant for classification

Specification :	LD-50
Routes of entry :	oral
Test species :	Rat
Value / dosage :	ca. 1400 mg/kg
Specification :	LD-50
Routes of entry :	skin (2 % ready-to-use solution)
Test species :	Rat
Value / dosage :	> 2000 mg/kg

Testing method : OECD 401. - OECD 402.

Primary irritant effect

Rabbit skin: non-irritant (2 % solution). Rabbit eye: irritant (2 % solution). Testing method : OECD 405.

Sensitization

No data available.

Experience on practice

Eye contact with a 2 % application solution is associated with an irritating effect, but skin contact does not cause any irritations.

Additional toxicological information

The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (1999/45/EC).

12. Ecological information

Details on elimination (persistence / degradability)

Abiotoxic elimination

No data available.

Biological degradation / elimination

The organic ingredients are biodegradable at the dilution rates arising in the sewage system.

Fate in environmental compartments

There are no data available on the preparation itself.

Ecotoxicological effects

Performance in sewage-treatment plants

In case of appropriate conduction into adapted biological purification plants no disturbances have to be expected.

Other information

Alkylamine (30 % in water): fish toxicity LC 50 = 2,26 mg/l (rainbow trout/96 h) / EC 50 = 2,20 mg/l (daphnia magna/24 h).

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13. Disposal considerations

Product

Concentrate/larger quantities: EWC 07 06 99 Waste, n.o.s. (disinfectant). Disposal in conformity with authority regulations.

Contaminated packaging

Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner as the medium.

14. Transport information

Land transport ADR/RID

Classification

Class : 8 Kemlercode : 80
UN number : 1719 Classification-Code : C5

LQ22 · E 2 · Tunnel restriction code : E

Proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S.

Hazardous components

3-AMINOPROPYL-DODECYL-1,3-PROPANEDIAMINE · ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE

Packaging

Packaging group : II
Label : 8 / N

Maritime transport IMDG/GGVSea

Classification

IMDG-Code : 8 EmS number : F-A / S-B
UN number : 1719 Marine Poll. : P

LQ 1 I · E 2

Proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S.

Hazardous components

3-AMINOPROPYL-DODECYL-1,3-PROPANEDIAMINE · ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE

Packaging

Packaging group : II
Label : 8 / N

Air transport ICAO-TI and IATA-DGR

Classification

Class : 8
UN number : 1719

E 2

Proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S.

Hazardous components

3-AMINOPROPYL-DODECYL-1,3-PROPANEDIAMINE · ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE

Packaging

Packaging group : II
Label : 8 / N

15. Regulatory information

Classification according to EC directives

Danger symbol and danger designation



C ; Corrosive

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N ; Dangerous for the environment

Hazard-determining components of labelling

3-AMINOPROPYL-DODECYLPROPANE-DIAMINE ; CAS-No. : 2372-82-9
ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS-No. : 68424-85-1

R-phrases

50 Very toxic to aquatic organisms.
48 Danger of serious damage to health by prolonged exposure.
35 Causes severe burns.
22 Harmful if swallowed.

S-phrases

61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
37/39 Wear suitable gloves and eye/face protection.
46 If swallowed, seek medical advice immediately and show this container or label.
28 After contact with skin, wash immediately with plenty of water.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice .

16. Other information

Processing instructions / technical data sheets

Please observe the label/directions for use!

Further information

Relevant changes

03. Hazardous components · 14. Land transport ADR/RID and GGVS/GGVE · 14. Classification (ADR) · 14. Proper shipping name (ADR) · 14. Classification (IMDG) · 14. Proper shipping name (IMDG) · 14. Air transport ICAO-TI and IATA-DGR · 14. Classification (ICAO) · 14. Proper shipping name (ICAO) · 15. R-phrases

R-Phrases of components

22 Harmful if swallowed.
34 Causes burns.
35 Causes severe burns.
41 Risk of serious damage to eyes.
48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
50 Very toxic to aquatic organisms.

Contact

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Dipl. Ing. Elisabeth Gehring Tel. No.: +49 7154 1308-37

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
