

Safety Data Sheet

according to Regulation EC Nr. 1907/2006

1. Product and Company Identification

Product details

Trade name: **BECHTOL PREMIUM**
Application: Disinfection and cleansing of medical devices

Manufacturer / Supplier

Alfred Becht GmbH
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2. Hazards Identification

Classified in accordance with directive (EC) No. 1272/2008 concerning classification, description and packaging of substances and mixtures:

H302 Harmful if swallowed. Acute toxicity: Category 4 (oral)
H312 Harmful in contact with skin. Acute toxicity: Category 4 (dermal)
H314 Causes severe skin burns: Category 1B, and severe eye damage, corrosive to skin
Category 1B, sensitization of the skin: Category 1
H332 Harmful if inhaled. Acute toxicity: Category 4 (inhalation)

Classification acc. to directive 67/548/EEC:

C, R35 Causes severe burns.
R43 May cause sensitization by skin contact.
Xn, R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

3. Composition / Data on components

Chemical characterization

Description:

Mixture of substances with non-hazardous additions:

Ingredients	CAS-No. EINECS-No.	Design. (RL 67/548/ECC) Design. (EC 1272/2008)	R-phrases H-phrases	Concentration
Benzalkonium chloride	68424-85-1 270-325-2	C, N Acute Tox. 4, Skin-corr. 1B, Aquatic Acute 1	22-34-50 H302, H314, H40	5 - 10 %

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Ingredients	CAS-No. EINECS-No.	Labeling (RL 67/548/ECC) Labeling (EC 1272/2008)	R-phrases H-phrases	Concentration
N-(3-aminopropyl)- N-dodecylpropane- 1,3-diamine	2372-82-9 219-145-8	C, N Acute Tox. 3, Skin-corr. 1A, STOT RE 2, Aquatic Acute 1	22, 48/22, 35, 50 H301, H314, H373, H400	< 5 %
diethylenetriamine	111-40-0 203-864-4	C Acute Tox. 4 (oral), Acute Tox. 3 (dermal), Skin-corr. 1B, Skin Sens. 1	21/22, 34, 43 H302, H301, H314, H317	5 – 10 %
3-cyclohexyl- aminopropyl amine	3312-60-5 222-001-1	C Acute Tox. 4 (oral), Skin-corr. 1A, Skin Sens. 1 Aquatic Acute 3	22, 35, 43, 52/53 H302, H314, H317, H412	< 5 %
nitriлотriacetic	139-13-9 205-355-7	Xn Carcinogenicity, 2, Acute Tox. 4, Eye damage/irr., 2	22, 36, 40 H351, H302, H319	1 %

Classification acc. to directive (EC No. 1272/2008):

H302 - Harmful if swallowed. Acute toxicity: Category 4 (oral)

H312 - Harmful in contact with skin. Acute toxicity: Category 4 (dermal)

H314 - Causes severe skin burns: Category 1B, and severe eye damage
Category 1B, sensitization of the skin: Category 1

H332 - Harmful if inhaled. Acute toxicity: Category 4: Kat 4 (inhalation)

Classification acc. to directive 67/548/ECC:

C, R35, 43 - Causes severe burns, may cause sensitization by skin contact.

Xn, R20/21/22 - Harmful if inhaled, in contact with skin and if swallowed.

Additional information:

Risk assessment, please refer to chapter 16.

4. First aid measures

General recommendation: Take off contaminated clothing. In case of health problems seek medical advice.

After inhaling: After inhalation of vapors: no treatment necessary, otherwise same treatment as aerosol.

Aerosol (droplets): may inflame the mucous membrane in the lungs causing a partial loss of function. This can be stabilized by giving the patient oxygen.)

After skin contact: Wash immediately with plenty of water and soap and eventually applying grease (fat) to the affected area. If skin irritation persists seek medical advice. Remove contaminated clothing immediately.

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After eye contact: Rinse cautiously with water and continue rinsing for min.15 minutes with eyelids open. Remove contact lenses if possible, continue rinsing even when contact with the eye is no longer painful. Seek medical advice immediately, bring the container or label and present it to the medical personnel!

After swallowing: Do not induce vomiting. Drink plenty of water or other liquids. Do not drink fruit juices, the esophagus could be inflamed.
Eventually neutralize with active coal or another neutralizing agent.

Advice for medical first aid or special treatment:

This product is a protein dissolving irritant. By diluting with water the effects can be reduced or nullified.

5. Firefighting measures

Suitable extinguishing agents:

Water jet, extinguishing powder, CO²

Unsuitable extinguishing agents:

Halon

Special hazards caused by the material, its products of combustion or resulting gases:

Irritation to the skin, lungs and eyes caused by vapors produced when extinguished with water.

Special equipment during firefighting:

Enter the danger zone only with a self-contained breathing apparatus.

Avoid skin contact by the wearing of tightly closed chemical protection suits and by keeping a safe distance away.

Additional information:

Fire residues and contaminated extinguishing water must be disposed of according to official regulations.

6. Accidental release measures

Person-related safety precautions:

- Do not inhale vapors / aerosols.
- Avoid contact with eyes and skin.
- Oxygen mask or self-contained breathing apparatus.
- Wear impermeable clothing.
- Take off contaminated clothing and shower.
- Ensure adequate ventilation.

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Measures for environmental protection:

Do not allow undiluted product to reach sewage system or surface water systems.
When product comes in contact with water or sewage systems contact proper authorities.

Measures for disposal:

Absorb major quantities with liquid-binding material (sand, universal binders, diatomaceous, sawdust). Dispose of the material collected according to official regulations. Ensure adequate ventilation.

7. Handling and Storage

Handling:

Information for safe handling:

- Avoid skin and eye contact.
- Do not inhale aerosol (droplets).
- Wear protective clothing, eye protection and gloves.
- Ensure proper ventilation.
- Badly ventilated areas may require forced air ventilation.

Fire and explosion information:

Not required.

Storage:

Do not store with medical supplies, foodstuff or animal feed.
Keep away from children

Incompatible storage:

Not required.

Requirements to be met by storerooms and containers:

Suitable material for containers: plastic.
Do not store with medical supplies, foodstuff or animal feed

Further information pertaining to storage conditions:

Storage temperature: 0 - 25°C
Expiry: 2 years and 6 months max.
Do not expose to direct sun light
Storage class VCI: 8 B
Classification according to regulation on inflammable liquid: not classified

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8. Exposure Controls and Personal Protection

Additional information about design of technical systems: no further data; see article 7.

Parameters requiring monitoring:

Amine, sum parameter

Measuring for example with a periodic test tube amine-test, quality check.

DNEL/DMEL-Value: not determined

PNEC-Value: not determined

Remarks: The substance is not volatile.

Technical protection:

Concentrate and ready-to-use-solution should only be handled at room temperature (< 22°C) in a well-ventilated area to avoid formation of aerosols.

Respiratory protection: not required by normal handling.

Skin protection: protective clothing

Material of gloves: Latex gloves

Protection provided:

<5 minutes are sufficient for one application.

For longer applications butyl rubber gloves 0.4mm are recommended.

For splash protection Latex and Rubber gloves are recommended

Eye protection: Goggles or full face protection

Protective clothing: Impermeable clothing, protective gloves and eyewear / face protection

Hygienic measures:

No drinking, eating or smoking at your workplace, after work hands and face should be washed.

Protective measures: use only in well ventilated areas

Limit and control the exposure to the environment.

9. Physical and Chemical Properties

Form: fluid

Color: clear

Odor: perfumed

Change of state:

Melting point/Melting range: < 0 °C

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Boiling point/Boiling range:	> 100 °C
Flashpoint:	not determined
Self-Inflammability:	not determined
Danger of explosion:	not determined
Reid vapor:	approx. 10000 Pa at 20°C (water) *approx. 0,20 Pa at 20°C (active ingredient)
Density at 20 °C:	1,005 - 1,015 g/cm ³
Solubility in / Miscibility with Water at 20 °C:	fully miscible
ph value at 20 °C:	11,0 – 11,6
Dynamic viscosity at 20 °C:	not determined

10. Stability and Reactivity

Thermal decomposition/conditions to be avoided:

No decomposition by proper storage and handling
Reacts with acid with heat/do not store in direct sunlight
Do not mix with oxidizing materials

Products to be avoided: Acids and oxidizing materials

Dangerous reactions: When mixed with concentrated nitric acid, nitrosamine can be created as a dangerous bi-product of decomposition.

Dangerous decomposition products: none

11. Toxicological Information

Acute toxicity:

Acute toxicity by oral: LD50 rat (oral) > 1500 mg/kg (computed value)

Acute toxicity by inhalation: Vapor- the vapor pressure of all the ingredients is so low that no danger exists by inhaling vapors from the concentrate or ready to use solution.

Dangers of aspiration:

Direct inhalation of aerosol droplets should be avoided. Aerosol will irritate the eyes, airway and mucous membrane of the lungs.

Acute Toxicity by way of skin contact: LD50 rat (dermal) >1400->2800mg/kg

Skin irritation: corrosive (caustic)

Eye irritation: corrosive (caustic)

Sensitization: by skin contact

Toxicity by repeated exposure: not determined

Danger from aspiration: high

By aspiration the product irritates the airway and lungs.

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Genotoxicity in vivo: not determined
Carcinogenicity: not determined
Reproductive toxicity: not determined
Teratogenicity: not determined

Additional Information:

When the safety precautions are properly followed the product can be used safely.

Primary irritation:

Skin: Irritates skin and mucous membrane.
Eyes: Irritates and can cause irreversible eye damage.
Sensitization: can occur by skin contact.

After analysis in accordance with the current EC regulations for mixtures the product has exhibited the following hazards:

- Causes severe irritation
- Sensitization can occur by skin contact
- Harmful when inhaled ,ingested or in contact with skin

12. Ecological Information

Persistence and degradability:

The ingredients of the product are biologically and abiotic degradable.

Photo degradation: Biodegradable

Ecological effect: Not defined

The product changes the pH value of the water and the surface tension. The change in surface tension is deadly for many aquatic organisms. The determination of toxicity towards aquatic organisms is therefore not required or justified

Additional ecological information:

When properly used the diluted product solution can be disposed of in the local sewage system. Therefore information towards toxicity effecting fish and daphnia is not relevant.

The product is de-toxicated by diluting with normal tap water before it enters the sewage system.

The individual ingredients of the product are biologically degraded in the sewage treatment plant. Disposed of with the sewage sludge or bonds with solid sewage particles before entering the on-site pre-flooder.

Effects to sewage treatment facilities:

No negative effects to sewage treatment facilities can be expected when properly diluted mixtures are disposed of in the sewage system.

Results of PBT and vPvB assessment:

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The ingredients concur with the current criteria of REACH regulations.
No PBT or vPvB substances.

13. Disposal Considerations

Product:

Recommended: Disposal in accordance with official regulations.

*Diluted product solution can be disposed of in the local sewage system.

EVC Waste Code 07 06 00 (Waste from HZVA pertaining to grease, lubricants
detergents ,disinfectants and toiletries.)

Contaminated packaging:

Recommended: Dispose of residual waste. Recycle only after thoroughly cleaning.

EVC Waste Code 15 01 10 (Packaging containing hazardous residual waste or that
have been contaminated with hazardous residual waste.)

14. Transport Information

Land transport ADR/RID und GGVS/GGVE (cross border/national)

ADR/RID Class: 8

Classification Code: C9

Tunnel Category 3(E)

UN-Number 1760

Packing Group (PG): III

Hazardous Labels: 8

Designation of goods: CORROSIVE LIQUID, N.A.G.
(ALKYLDIMETHYLBENZYLAMMONIUMCHLORIDE)

Shipment by Inland Waterways ADN/ADNR Not classified

Maritime transport IMDG/GGV - Sea:

IMDG Class: 8

UN-Number: 1760

Hazardous Labels: 8

Packaging Group: III

EMS-Number: F-A, S-B

Marine Pollutant: no

Designation of goods: CORROSIVE LIQUID, N.O.S.
(ALKYLDIMETHYLBENZYLAMMONIUMCHLORIDE)

Air transport ICAO-TI und IATA-DGR:

ICAO/IATA Class: 8

UN/ID-Number: 1760

Hazardous Label: 8

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Packing group: III
Designation of goods: CORROSIVE LIQUID, N.O.S.
(ALKYLDIMETHYLBENZYLAMMONIUMCHLORIDE)

15. Regulatory Information

Labeled in accordance with EC regulations

This product is classified and labeled in accordance regulation (EC) Nr. 1272/2008

Elements of labeling and preventive declarations:

Hazard pictograms



Signal word: Danger

Hazards:

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H332 Harmful when inhaled.

Precautions:

- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P352+353 CONTACT WITH SKIN: Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing.
- P363 Wash contaminated clothing before reuse.
- P305+P351+P338 CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing.
- P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P312 feelings of nausea. Contact POISON INFORMATION CENTER or contact a physician
- P260 Do not inhale aerosols.
- P304+P340 IF INHALED: provide victim with fresh air and place in a position that provides ease in breathing
- P102 Keep out of reach of children.
- P405 Store under lock and key.

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- National regulations

Ingredients are specified in MAK-List 2007 appendix 4

Statutory order on hazardous incidents: product does not fall under this regulation

Water Hazard Class: 2 (self-rating)

TA-air

Safety regulations:

Employment restrictions: For pregnant women and persons under 18: yes

Chemical Prohibition Ordinance: yes

16. Other Information

n.a. = not applicable

n.d.a. = no data available

* = revised

Hazard statements which are referred to in part 2 and 3
according to regulation (EC) Nr. 1272/2008

H301 Poisonous if swallowed. Acute Toxicity, Cat 3 (oral)

H302 Harmful if swallowed. Acute Toxicity: Cat 4 (oral)

H312 Harmful in contact with skin. Acute Toxicity: Cat 4 (dermal)

H314 Causes severe skin burns and eye damage. Corrosive to skin: Cat. 1B

H317 May cause an allergic skin reaction. Sensitization of the skin Cat 1

H319 Causes serious eye irritation. Cat 2

H332 Harmful if inhaled. Acute Toxicity: Cat 4 (inhalative)

H351 Suspected of causing cancer. Carcinogenicity: Cat 2

H373 May cause damage to organs through prolonged or repeated exposure. Specific
target-organ toxicity (repeated exposure): Cat 2

H 400 Very toxic to aquatic organisms. Cat 1

H 412 Harmful to aquatic life with long lasting effects.

Chronically hazardous to water: Cat. 3

According to regulation 67/548/EC

C, N, R 21/22 Harmful by contact with skin and if swallowed.

R 22 Harmful if swallowed.

R 34 Causes burns.

R 35 Causes severe burns.

R 43 Sensitization of the skin possible.

R 48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R 50 Very toxic to aquatic organisms.

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

Xn, R 36 Irritating to eyes.

R 40 Limited evidence of a carcinogenic effect.

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Related EC-Directives:

Dangerous Preparation Directive (1999/45/EC), latest amendment by the directive (EC) No. 1907/2006

Dangerous substance directive (67/548/EEC), latest amendment by the directive 2009/2/EC
REACH Directive (EC) No. 1907/2006, latest amendment by the directive (EC) No. 552/2009
Directive (EC) No. 1272/2008 (CLP-(EC-GHS-) Directive)

This data is 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.