

EC Material Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)

1. Product and Company Identification

- Product details

Trade name: **Bechtol Plus**

Application: Ready-to-use solution for disinfecting and cleaning of rotating instruments

- 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:

H315 Causes skin irritation, Category 2
H319 Causes serious eye irritation, Category 2

Classification in accordance with directive 67/548/EEC

Xi ,R 36/38 Irritating to eyes and skin

3. Composition/Data on components

- Chemical characterization

- Description:

Mixture of the substances listed below with harmless additions:

Ingredient Name	CAS-No./ EINECS-No.	Marking (RL 67/548/EEC) Marking (EC 1272/2008)	R-Phrases * H-Phrases	Concentration
*Potassium Hydroxide Solution	1310-58-3 215-181-3	C, Skin irritation 1B	22/35 H314	≤ 0,5%
*Sodium hypochlorite	7681-52-9 231-668-3	C, N Skin irritation 1A	31/34/50 H314	0,1% active chlorine

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Additional Information: Risk assessment, please refer to chapter 16.

4. First aid measures

General recommendation: seek medical attention

*After skin contact: After contact with skin, wash immediately with plenty of soap and water, remove contaminated clothing under running shower.

*After eye contact: In case of contact with eyes, rinse immediately with plenty of water for several minutes and seek medical advice. If possible bring the label or container with you. If contact lenses are worn, remove and rinse again.

After swallowing: **Recommendation:** keep an eyewash bottle at the workstation
Drink plenty of water. Do not induce vomiting; seek medical attention immediately. Do not administer a neutralizing agent .

*After inhalation: Provide fresh air, if problems with breathing arise seek medical advice. If patient is unconscious, transport in recovery position. If necessary give mouth to mouth. Keep patient warm.

5. Fire-fighting measures

Not applicable. Solution contains organic components in small concentration only.

Suitable extinguishing agents: - foam, extinguishing powder, sand or water jet, CO₂.

Unsuitable extinguishing agents: - no information available

Special hazards caused by the material, combustible materials and resulting gases:

- not combustible.

Reacts with aluminum, zinc, tin or other light metals producing hydrogen.

Special precautions during fire-fighting:

- Chemical protection suit and a self-contained breathing apparatus.

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6. Accidental release measures

Personal safety precautions:

- Wear protective clothing.
- Keep unauthorized people away.
- Ensure adequate ventilation.
- Avoid skin and eye contact.

Measures for environmental protection:

- Do not allow concentrate to reach sewage system or other bodies of water.

Measures for cleaning/collecting:

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

7. * Handling and storage

Handling

- Keep container firmly sealed.
- Keep in a cool and dry place.
- Keep well ventilated.

Storage

Requirements to be met by storerooms and containers:

- Do not use containers made of light metals such as aluminum, zinc or tin.
- Keep away from food and foodstuffs
- Do not store with cleaning agents or acids
- Keep cool and dry ,do not store in residential buildings

Storage conditions:

- Storage temperature : 0-25° C
- Expiry: 30 months
- Do not expose to direct sunlight.
- Storage class: 12 non-flammable liquid

Intended use: Cleaning and disinfecting agent for contaminated instruments.
Do not use on instruments containing aluminum, zinc or tin

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8. *Exposure controls and personal protection

General protective and hygienic measures:

When using chemicals general safety regulations are to be followed.

- Ready-to-use solutions are to be used by properly trained and qualified persons.
- minors are not to use the solutions
- opened containers are to be sealed after use.

With a 1% Disinfecting mixture the chlorine in the air is between

- 0,15 to 0,25 ppm

With a ready-to-use solution the chlorine in the air is between

- 0,45 to 0,75 ppm or 2,25 mg/cm³

The ready-to-use solution should only be handled for 10 minutes per day.

It should be used with the following safety equipment:

- Safety gloves: Chemical resistant gloves (EN 374)
- Safety glasses: Glasses with side shields (166)
- Safety clothing: Long armed protective clothing
- Breathing: Use in well ventilated areas

There must be an eye wash station and a shower or sink with a shower head available.

9. Physical and chemical properties:

- | | |
|---|----------------------------------|
| - Form: | Fluid |
| - Color: | yellowish, clear |
| - Odor: | perfumed |
| - pH value: | approx. 12,5 (at 20° C) |
| - Change in condition | |
| Melting point/ Melting range | not determined |
| Boiling point/ Boiling range | not determined |
| - Flash point: | not determined |
| - Self-inflammability: | not determined |
| - Danger of explosion: | not determined |
| - Density: | 1,0 g/cm ³ (at 20° C) |
| - Solubility in / Miscibility with water: | fully miscible |

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10. Stability and reactivity

Thermal decomposition/conditions to be avoided:

No information available

Products to be avoided: Reaction with light alloys such as aluminum, tin or zinc and other such alloys can produce hydrogen (risk of explosion)

*Dangerous reactions: May react with acids under elevated temperatures

With heat comes evaporation and thus the creation of combustible gases in the air.

Additional information: incompatible with metals, various plastics, glass, animal and vegetable tissue

11. Toxicological information

Acute toxicity:

For potassium hydroxide KOH: LD 50 (oral, rat): 273 mg/kg

Primary irritant effect:

To the skin: Irritates skin in presence of Potassium Hydroxide

Sensitization: No sensitizing effect known.

*Sodium hypochlorite solution. LD 50 (oral, rat): 8200 mg/kg (pure)

Primary effects:

- irritates skin and mucus membranes (i.e. airway)
- Risk of serious irreversible eye damage (blindness)
- Sensitization : no known effect

12. Ecological information

General notes:

Weakly hazardous for water.

Does not raise the biological need for oxygen. Neutralization in sewage treatment plant possible.

Eco-toxicological risks: toxic in high concentrations for water microbes (pure substance) by raised pH

Biological decomposition:

Methods to determine the biological decomposition are not applicable for inorganic substances.

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13. Disposal recommendations:

Product:

- Recommendation: Disposal in accordance with official regulations.

Contaminated packaging:

- Recommendation: Disposal in accordance with official regulations.

Classification according to European waste catalogue:

070699 wastes not otherwise specified

14. Transport information

Land transport ADR/RID-GGVSE

GGVS/GGVE	Class: 8	PG III
ADR/RID	Class: 8	PG III
Classification code/LQ	C5/7	
-*Tunnel Category	3(E)	
-*UN Number:	3266	
- Packaging Group	III	
- *Designation of goods	CORROSIVE LIQUID; BASIC; INORGANIC; N.O.S. (POTASSIUM HYDROXIDE SOLUTION; HYPOCHLORITE SOLUTION)	

Shipment by Inland waterways ADN / ADR: not classified

Maritime transport IMDG/GGF-Sea

- IMDG/GGVE-Sea	Class: 8
- UN-Number:	3266
- Packaging group:	III
- EMS Number:	F-A, S-B
- MFAG:	760
- Proper shipping name:	CORROSIVE LIQUID; BASIC; INORGANIC; N.O.S. (POTASSIUM HYDROXIDE SOLUTION; HYPOCHLORITE SOLUTION)

Air transport ICAO-TI and IATA-DGR

- ICAO/IATA.	Class 8
- UN/ID Number:	3266
- Packaging group:	III
- Proper shipping name:	CORROSIVE LIQUID; BASIC; INORGANIC; N.O.S. (POTASSIUM HYDROXIDE SOLUTION; HYPOCHLORITE SOLUTION)

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15. Regulatory information

The product is classified and labeled acc. to regulation 1272/2008/EC:

Elements of the labeling and preventive declarations:

hazard pictogram:



Signal Word: Warning

Hazards

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautions

P102 Keep out of reach of children

P264 Wash hands thoroughly after handling

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

P302 + P352 SKIN CONTACT: Wash with plenty of soap and water, remove contaminated clothing.

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

P305 + P351 + P338 CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if possible. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention

P403 Store in a well-ventilated place.

P 405 Store locked up.

National Regulations: Water Hazard Class 1 (self-rating) low hazardous to waters.

16. Other information:

n.a. = not applicable

* = modifications to last version

Hazard statements which are referred to in part 2 and 3 according to regulation (EC) No. 1272/2008

H315 Causes skin irritation. Category 2

H319 Causes serious eye irritation. Category 2

H314 Causes severe skin burns and eye damage 1A, 1B

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Causes severe burns and eye damage acc. to directive 67/548/EEC

R36/38 Irritating to eyes and skin

R22 Harmful if swallowed

R35 Causes severe burns

R31 Contact with acids liberates toxic gas

R34 Causes burns

R50 Very toxic to aquatic organisms

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.