

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

B. Braun Melsungen AG

Revision date: 11.01.2013

Revision No: 1,00

Tiutol dent

00056-0092

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

1.1. Product identifier

Tiutol dent

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

Use of the substance/mixture

Concentrated disinfectant for dental aspirators

1.3. Details of the supplier of the safety data sheet

B. Braun Melsungen AG

Carl-Braun-Straße 1

D-34212 Melsungen

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: C - Corrosive

R phrases:

Contact with acids liberates toxic gas.

Causes severe burns.

GHS classification

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

2.2. Label elements

Danger symbols:

C - Corrosive



C - Corrosive

Hazardous components which must be listed on the label

Sodium hydroxide

Sodium hypochlorite

R phrases

31 Contact with acids liberates toxic gas.

35 Causes severe burns.

S phrases

02 Keep out of the reach of children.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
50 Do not mix with Acids .
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Special labelling of certain mixtures

2.2. Label elements (GHS classification)

Signal word: Danger

Pictograms: GHS05



Hazardous components which must be listed on the label

Sodium hydroxide

Sodium hypochlorite

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

Special labelling of certain mixtures

EUH031 Contact with acids liberates toxic gas.

Additional advice on labelling

Classification and labelling according to Regulation (EC) No 1272/2008 Annex I paragraph 3.2.3.3.4.2 (pH value).

2.3. Other hazards

Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Alkaline concentrate

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
215-185-5	Sodium hydroxide	< 5 %
1310-73-2	C - Corrosive R35	
011-002-00-6	Met. Corr. 1, Skin Corr. 1A; H290 H314	
01-2119457892-27		
231-668-3	Sodium hypochlorite 3,9% Cl active	< 10 %
7681-52-9	C - Corrosive, N - Dangerous for the environment R34-31-50	
017-011-00-1	Skin Corr. 1B, Aquatic Acute 1; H314 H400	
01-2119488154-34		

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
 Dem behandelnden Arzt dieses Sicherheitsdatenblatt vorzeigen.
 Call a physician immediately.

After inhalation

Move victim to fresh air.
 Seek medical treatment immediately.

After contact with skin

Wash off immediately with soap and plenty of water.
 If symptoms persist, call a physician.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
 Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting.
 Rinse out mouth and give plenty of water to drink.
 Never give anything by mouth to an unconscious person.
 Summon a doctor immediately.
 Induce vomiting only upon the advice of a physician.

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

Causes severe skin burns and eye damage
 Hazard of gastric perforation.

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:

Nitrogen oxides (NO_x).

Sulfur oxide

Chlorine (Cl₂).

5.3. Advice for firefighters

Wear self-contained breathing apparatus and 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.

Ensure adequate ventilation.

Use personal protective clothing.

Contact with acids liberates toxic gas.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Clean contaminated surface thoroughly.

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.

Handle and open container with care.

Use only in thoroughly ventilated areas.

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 container tightly closed in a dry, cool and well-ventilated place.

Do not use aluminium or light metal containers for warehousing.

Advice on storage compatibility

Corroses base metals.

Do not store with acids.

Contact with acids liberates toxic gas.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Concentrated disinfectant for dental aspirators

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	-		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

8.2. Exposure controls**Occupational exposure controls**

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using, do not eat, drink or smoke.

Treat subsequently with skin cream.

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 B).

Hand protection

Protective gloves resistant to chemicals made off natural-rubber latex, minimum coat thickness 0.6 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Lapren 706> 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

Tightly fitting goggles.

Eye wash bottle with pure water.

Skin protection

Boots.

Rubber apron..

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: Liquid
 Colour: Light yellow
 Odour: Chlorine

Test method

pH-Value: Approx. 13,5

Changes in the physical state

Flash point: n.a.
 Lower explosion limits: n.a.
 Ignition temperature: n.a.
 Density (at 20 °C): 1,24 g/cm³
 Water solubility: Miscible
 (at 20 °C)

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

May develop chlorine if mixed with acidic solutions.

Reactions with metals, with evolution of hydrogen.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Metals

10.6. Hazardous decomposition products

May develop chlorine if mixed with acidic solutions.

Nitrous oxides (NOx)

Sulphurous oxides (SOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No toxicological data available.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	h
1310-73-2	Sodium hydroxide				
	Acute oral toxicity	LD50	2000 mg/kg	Rat	

Irritation and corrosivity

The product causes burns of eyes, skin and mucous membranes.

Sensitising effects

Not classified.

Severe effects after repeated or prolonged exposure

STOT/Single exposure: Not classified.

STOT/Repeated exposure: Not classified.

Aspiration hazard: Not classified.

Carcinogenic/mutagenic/toxic effects for reproduction

STOT/Single exposure: Not classified.

STOT/Repeated exposure: Not classified.

Aspiration hazard: Not classified.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Further information

Hazard of gastric perforation.

Liquid product causes severe burns, irritation of digestive system and bad healing sores.

Inhalation of mist causes irritation of respiratory system.

Risk of serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

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CAS No	Chemical name				
	Aquatic toxicity	Method	Dose	Species	h
1310-73-2	Sodium hydroxide				
	Acute fish toxicity	LC50	45,4 mg/l	Onchorhynchus mykiss	96

12.2. Persistence and degradability

Biodegradable (OECD): > 80%.

Biologically degradable after neutralization.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Low hazard to waters.

A pH-change becomes possible in water.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Where possible recycling is preferred to disposal.

Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations.

Waste disposal number of contaminated packaging

070601 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; aqueous washing liquids and mother liquors
Classified as hazardous waste.

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.

Contaminated packagings are to be treated like the product itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN1824

14.2. UN proper shipping name:

SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es):

8

14.4. Packing group:

II

Hazard label:

8



Classification code:

C5

Limited quantity:

1 L / 30 kg

Transport category:

2

Hazard No:

80

Tunnel restriction code:

E

Inland waterways transport (ADN)

14.1. UN number: UN1824
14.2. UN proper shipping name: SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Classification code: C5
Limited quantity: 1 L / 30 kg

Marine transport (IMDG)

14.1. UN number: UN1824
14.2. UN proper shipping name: SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Limited quantity: 1 L / 30 kg
EmS: F-A, S-B

Air transport (ICAO)

UN/ID number: UN1824
14.2. UN proper shipping name: SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Limited quantity Passenger: Y840 / 0,5 L
IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 855
IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

Dangerous for the environment: no

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

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1999/13/EC (VOC): 0%

Additional information

Regulation (EC) No 648/2004 (Regulation on detergents):

Polycarboxylates < 5%

Ingredients subject to the labelling obligation according to SCCP: -

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 1 - slightly water contaminating

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

31 Contact with acids liberates toxic gas.

34 Causes burns.

35 Causes severe burns.

50 Very toxic to aquatic organisms.

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

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

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.)