

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/26/2017

Reviewed on 10/26/2017

1 Identification

- **Product identifier**

- Trade name: **Dentabase**
- Article number: 3010-0449
- Application of the substance / the mixture Grinding auxiliary product

- **Details of the supplier of the safety data sheet**

- Manufacturer/Supplier: Supplier:
SIRONA Dental Systems GmbH
Fabrikstraße 31
D-64625 Bensheim
http://www.sirona.de
Telefon:+49(0)6251/16-1670
Telefax:+49(0)6251/16-1818

Manufacturer:
Graichen Produktions-und Vertriebs-GmbH
Darmstädterstraße 127-129
D-64625 Bensheim
Germany
Tel.: +49 6251 73103
Fax: +49 6251 77901
E-Mail: ehs@graichen-bensheim.de
www.graichen.net

- Information department: Environment protection department
- Emergency telephone number: Advice centre for poisoning university Mainz phone +49(0)6131/19240
or poison information:+49(0)700/GIFTINFO

2 Hazard(s) identification

- **Classification of the substance or mixture**

- Skin Corr. 1A H314 Causes severe skin burns and eye damage.
- Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**

- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS05

- Signal word

Danger

- Hazard-determining components of labeling:

sodium hydroxide

- Hazard statements
- Precautionary statements

Causes severe skin burns and eye damage.

Do not breathe dusts or mists.

Wash thoroughly after handling.

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

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- NFPA ratings (scale 0 - 4)



Health = 3

Fire = 0

Reactivity = 0

- HMIS-ratings (scale 0 - 4)

HEALTH 3 Health = 3

FIRE 0 Fire = 0

REACTIVITY 0 Reactivity = 0

- **Other hazards**

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- Dangerous components:

1310-73-2 | sodium hydroxide

Skin Corr. 1A, H314

25-50%

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- Additional information: For the wording of the listed hazard phrases refer to section 16.

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4 First-aid measures

Description of first aid measures

- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.
Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Call a doctor immediately.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Rinse out mouth and then drink plenty of water.
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- Information for doctor: No further relevant information available.
- Most important symptoms and effects, both acute and delayed: No further relevant information available.
- Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**: No further relevant information available.
- **Advice for firefighters**
- Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
- **Environmental precautions**: Ensure adequate ventilation
Do not allow to enter sewers/ surface or ground water.
Dilute with plenty of water.
- **Methods and material for containment and cleaning up**: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**: See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**:
 - Precautions for safe handling: No special precautions are necessary if used correctly.
 - Information about protection against explosions and fires: No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**:
 - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
 - Information about storage in one common storage facility: Store away from foodstuffs.
 - Further information about storage conditions: Protect from frost.
Store receptacle in a well ventilated area.
- **Specific end use(s)**: No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems**: No further data; see item 7.
- **Control parameters**

- Components with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

| | |
|-----|--|
| PEL | Long-term value: 2 mg/m ³ |
| REL | Ceiling limit value: 2 mg/m ³ |
| TLV | Ceiling limit value: 2 mg/m ³ |

- Additional information: The lists that were valid during the creation were used as basis.

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· Exposure controls

- Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

- Breathing equipment:
- Protection of hands:

Not required.
Alkaline resistant gloves
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

- Material of gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material

Value for the permeation: Level $\leq 0,7$ mm 480min (8h) EN374
The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:
- Body protection:

Tightly sealed goggles
Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

- General Information

- Appearance:

| | |
|-----------------|-----------------|
| Form: | Fluid |
| Color: | Colorless |
| Odor: | Odorless |
| Odor threshold: | Not determined. |

- pH-value at 20 °C (68 °F):

13,2

- Change in condition

| | |
|------------------------------|-----------------|
| Melting point/Melting range: | -6 °C (21.2 °F) |
| Boiling point/Boiling range: | 100 °C (212 °F) |

- Flash point:

Not applicable.

- Flammability (solid, gaseous):

Not applicable.

- Ignition temperature:

| | |
|----------------------------|-----------------|
| Decomposition temperature: | Not determined. |
|----------------------------|-----------------|

- Auto igniting:

Product is not selfigniting.

- Danger of explosion:

Not determined.

- Vapor pressure at 20 °C (68 °F):

23 hPa (17.3 mm Hg)

- Density at 20 °C (68 °F):

1,5 g/cm³ (12.5175 lbs/gal)

- Relative density

Not determined.

- Vapor density

Not determined.

- Evaporation rate

Not determined.

- Solubility in / Miscibility with

| | |
|--------|-----------------|
| Water: | Fully miscible. |
|--------|-----------------|

- Partition coefficient (n-octanol/water):

Not determined.

- Viscosity:

| | |
|----------|-----------------|
| Dynamic: | Not determined. |
|----------|-----------------|

- Solvent content:

| | |
|-------------------|--------|
| Organic solvents: | 0,0 % |
| Water: | 62,5 % |

| | |
|-----------------|--------|
| Solids content: | 50,0 % |
|-----------------|--------|

- **Other information**

No further relevant information available.

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10 Stability and reactivity

- **Reactivity** No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with light alloys to form hydrogen.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** oxidizing agents
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- Acute toxicity:

- LD/LC50 values that are relevant for classification:

1310-73-2 sodium hydroxide

| | | |
|------|------|-------------------|
| Oral | LD50 | 1,350 mg/kg (rat) |
|------|------|-------------------|

- Primary irritant effect:
 - on the skin: Strong caustic effect on skin and mucous membranes.
 - on the eye: Strong caustic effect.
Strong irritant with the danger of severe eye injury.
- Sensitization: No sensitizing effects known.
- Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- Aquatic toxicity: No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
- **Additional ecological information:**
- General notes: Must not reach bodies of water or drainage ditch undiluted or unneutralized. Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous. Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- PBT: Not applicable.
- vPvB: Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- Recommendation: Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- Recommendation: Non contaminated packagings can be treated like household garbage.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
- DOT, ADR, IMDG, IATA UN1824
- **UN proper shipping name**
- DOT Sodium hydroxide solution

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· ADR 1824 Sodium hydroxide solution
 · IMDG, IATA SODIUM HYDROXIDE SOLUTION
 · **Transport hazard class(es)**
 · DOT



· Class 8 Corrosive substances
 · Label 8

· ADR



· Class 8 (C5) Corrosive substances
 · Label 8

· IMDG, IATA



· Class 8 Corrosive substances
 · Label 8
 · **Packing group** II
 · DOT, ADR, IMDG, IATA
 · **Environmental hazards:**
 · Marine pollutant: No
 · **Special precautions for user** Warning: Corrosive substances
 · Danger code (Kemler): 80
 · EMS Number: F-A,S-B
 · Segregation groups Alkalis
 · Stowage Category A
 · Segregation Code SG35 Stow "separated from" acids.
 · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· ADR
 · Excepted quantities (EQ) Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· IMDG
 · Limited quantities (LQ) 1L
 · Excepted quantities (EQ) Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml
 · **UN "Model Regulation":** UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 · Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS05

· Signal word

Danger

· Hazard-determining components of labeling:

· Hazard statements

· Precautionary statements

sodium hydroxide

Causes severe skin burns and eye damage.

Do not breathe dusts or mists.

Wash thoroughly after handling.

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

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:**

Environment protection department.

· Date of preparation / last revision

10/26/2017 / 1800

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

· * Data compared to the previous version altered.