

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Trade name: DEN (Denaturation Solution)

Date of issue: June 05, 2002

Revised at: November 04, 2019 (Version K)



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

1.1 Product identifier

Trade name: DEN (Denaturation Solution); component of all kits of the **GenoType** series, the **ThromboType**[®] series, and the **micro-IDent**[®] series

Order number: 004-001-12 (0.3 ml), 007-012-96 (1.2 ml)

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

Laboratory chemical

1.3 Details of the supplier of the safety data sheet

Hain Lifescience GmbH

Hardwiesenstr. 1

72147 Nehren, Germany

Tel.: +49 (0) 74 73- 94 51- 0

E-mail: msds@hain-lifescience.de

1.4 Emergency telephone number

+49 (0) 74 73- 94 51- 0 (Mon-Fri 8:00-17:00 CET)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008:

Skin Irritation (category 2)

Eye Irritation (category 2)

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008:

Hazard pictogram:



Signal word:

Warning

Hazard statements:

H315:

Causes skin irritation.

H319:

Causes serious eye irritation.

Precautionary statements:

P280:

Wear protective gloves/protective clothing/eye protection.

P305+351+338: IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P313:

Get medical advice/attention.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

<2% **Sodium hydroxide** (Index no. 011-002-00-6, EC no. 215-185-5, CAS no. 1310-73-2): Classification of sodium hydroxide (100%) according to Regulation (EC) No. 1272/2008: Corrosive to metals (category 1), skin corrosion (category 1A); H290-314

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Full text of hazard statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If symptoms arise, call a physician.

If inhaled:	Remove to fresh air. Call a physician.
If swallowed:	Wash out mouth with plenty of water. Drink plenty of water. Call a physician.
In case of skin contact:	Immediately wash skin with soap and copious amounts of water. Remove contaminated clothing. Call a physician.
In case of eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Ensure adequate flushing by separating the eyelids with fingers. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

No restriction; use any means suitable for extinguishing surrounding fire.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear gloves and chemical safety goggles. Ventilate area and wash spill site after material pickup is complete.

6.2 Environmental precautions

Do not allow large quantities of product to enter drains.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.

6.4 Reference to other sections

Disposal: see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

No further requirements.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed at 2-8°C in a dry, ventilated area away from heat sources and flammable and toxic substances.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Does not contain substances with exposure limit values.

8.2 Exposure controls

Wear suitable protective clothing, gloves, and chemical safety goggles when handling the product. Close vial tightly immediately after use. Wash hands thoroughly after handling.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) Appearance: blue liquid
- b) Odour: none
- c) Odour threshold: No data available.
- d) pH: 13.0-13.5 (at room temperature)
- e) Melting point/freezing point: No data available.
- f) Initial boiling point and boiling range: No data available.
- g) Flash point: No data available.
- h) Evaporation rate: No data available.
- i) Flammability (solid, gas): No data available.
- j) Upper/lower flammability or explosive limits: No data available.
- k) Vapour pressure: No data available.
- l) Vapour density: No data available.
- m) Relative density: 1.0
- n) Solubility(ies): water soluble
- o) Partition coefficient n-octanol/water: No data available.
- p) Auto-ignition temperature: No data available.
- q) Decomposition temperature: No data available.
- r) Viscosity: No data available.
- s) Explosive properties: No data available.
- t) Oxidising properties: No data available.

9.2 Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

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10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Strong acids. Can corrode alloys of copper, lead, and silicon.

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

a) Acute toxicity:

Sodium hydroxide:

LD50 (oral, rat): 1350 mg/kg

b) Skin corrosion/irritation: No data available.

c) Serious eye damage/irritation: No data available.

d) Respiratory or skin sensitisation: No data available.

e) Germ cell mutagenicity: No data available.

f) Carcinogenicity: No data available.

g) Reproductive toxicity: No data available.

h) Specific target organ toxicity - single exposure: No data available.

i) Specific target organ toxicity - repeated exposure: No data available.

j) Aspiration hazard: No data available.

SECTION 12: Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

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.

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12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of unused reagents and waste in accordance with federal, state, and local regulations.

SECTION 14: Transport information

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packing group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

The following hazard statements refer to the classification of the components (pure substance, 100%) and not to the classification of the mixture:

H290: May be corrosive to metals.

H314: Causes severe skin burns and eye damage.

The above product shall be used by trained staff only. The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide. Hain Lifescience shall not be held

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liable for any damage or other consequences resulting from handling or from contact with the above product.

Changes compared to the previous version of this document:

Annex: Exposure Scenarios

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Annex: Exposure Scenarios

The following exposure scenario refers to the component sodium hydroxide (pure substance, 100%) and not to the mixture.

Short title of exposure scenario: Use in laboratories

Consumer applications

SU3, SU8; ERC1; ERC2, ERC4, ERC5, ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, **PROC15**

Control of exposure and risk management measures:

<i>Operational conditions</i>	
Duration and frequency	5 workdays/week
<i>Physical parameters</i>	
Physical state	Fluid
<i>Other operational conditions</i>	
Other operational conditions affecting environmental exposure	No special measures required.
Other operational conditions affecting worker exposure	Indoor application. Avoid contact with eyes. Avoid contact with the skin.
Other operational conditions affecting consumer exposure	No special measures required.
Other operational conditions affecting consumer exposure during the use of the product	Not applicable.
<i>Risk management measures</i>	
Worker protection	
Organizational protective measures	No special measures required.
Technical protective measures	Ensure that suitable extractors are available on processing machines
Personal protective measures	Do not inhale gases / fumes / aerosols. Avoid contact with the skin. Avoid contact with the eyes. Tightly sealed goggles Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Measures for consumer protection	Ensure adequate labelling.

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<i>Environmental protection measures</i>	
Water	Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralization is required.
Disposal measures	Ensure that waste is collected and contained.
Disposal procedures	Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Waste type	Partially emptied and uncleaned packaging
<i>Exposure estimation</i>	
Worker (dermal)	The calculated value is smaller than the DNEL.
Consumer	Not relevant for this Exposure Scenario.
Guidance for downstream users	No further relevant information available.