

**Trade name:** DNA-500 Buffer OEM (50pcs)**Product no.:** 292-36150-91**Current version :** 3.0.0, issued: 18.08.2022**Replaced version:** 2.0.0, issued: 17.07.2018**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

**DNA-500 Buffer OEM (50pcs)****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

General chemical processes

**Uses advised against**

No data available.

**1.3 Details of the supplier of the safety data sheet****Address**

Shimadzu Europa GmbH

Albert-Hahn-Str. 6-10

47269 Duisburg

Telephone no. +49 (0)203 - 7687-0

Fax no. +49 (0)203 - 711045

**Information provided by / telephone**

Tel.: +49 (0)203 - 7687-0

**Advice on Safety Data Sheet**

sdb\_info@umco.de

**1.4 Emergency telephone number**

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Repr. 1B; H360

**Classification information**

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS08

**Signal word**

Danger

**Hazardous component(s) to be indicated on label:**

boric acid

**Hazard statement(s)**

H360 May damage fertility or the unborn child

**Precautionary statement(s)**

P201 Obtain special instructions before use.

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

**Supplemental label elements**

"Restricted to professional users"

**2.3 Other hazards**

No data available.

**Trade name:** DNA-500 Buffer OEM (50pcs)**Product no.:** 292-36150-91**Current version :** 3.0.0, issued: 18.08.2022**Replaced version:** 2.0.0, issued: 17.07.2018**Region:** GB**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable. The product is not a substance.

**3.2 Mixtures****Chemical characterization**

Buffer solution including boric acid, edta and water soluble polymer.

**Hazardous ingredients**

| No | Substance name                               |                                     | Additional information |     |
|----|--|-------------------------------------|------------------------|-----|
|    | CAS / EC / Index / REACH no                  | Classification (EC) 1272/2008 (CLP) | Concentration          | %   |
| 1  | <b>boric acid</b>                            |                                     |                        |     |
|    | 10043-35-3<br>233-139-2<br>005-007-00-2<br>- | Repr. 1B; H360FD                    | < 5.00                 | wt% |

Full Text for all H-phrases and EUH-phrases: pls. see section 16

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

**After inhalation**

Remove affected person from the immediate area. Ensure supply of fresh air.

**After skin contact**

Wash off immediately with soap and water.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

**After ingestion**

Seek medical advice immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.

**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****Suitable extinguishing media**

Water spray jet; Carbon dioxide; Extinguishing powder; Foam

**Unsuitable extinguishing media**

High power water jet

**5.2 Special hazards arising from the substance or mixture**

No data available.

**5.3 Advice for firefighters**

No data available.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8.

**For emergency responders**

No data available. Personal protective equipment (PPE) - see Section 8.

**6.2 Environmental precautions**

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

**6.3 Methods and material for containment and cleaning up**

Pick up with absorbent material (e.g., sand, sawdust, general-purpose binder). When collected, handle material as described under the section heading "Disposal considerations".

**Trade name:** DNA-500 Buffer OEM (50pcs)**Product no.:** 292-36150-91**Current version :** 3.0.0, issued: 18.08.2022**Replaced version:** 2.0.0, issued: 17.07.2018**Region:** GB**6.4 Reference to other sections**

No data available.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****General protective and hygiene measures**

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work.  
 Provide eye wash fountain in work area.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Keep container dry in a cool, well-ventilated place. Protect from sun.

**Recommended storage temperature**

Value 2 - 8 °C

**Requirements for storage rooms and vessels**

Containers which are opened must be carefully closed and kept upright to prevent leakage.

**7.3 Specific end use(s)**

No data available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

No parameters available for monitoring.

**8.2 Exposure controls****Appropriate engineering controls**

No data available.

**Personal protective equipment****Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

**Eye / face protection**

Safety glasses (EN 166)

**Hand protection**

In case of intensive contact, wear protective gloves (EN 374). Check in any case suitability of protective glove for the specific workplace conditions (e.g. mechanical resistance, product compatibility, antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves.

**Other**

Normal chemical work clothing.

**Environmental exposure controls**

No data available.

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

|                                      |           |    |
|--------------------------------------|-----------|----|
| <b>State of aggregation</b>          |           |    |
| liquid                               |           |    |
| <b>Form</b>                          |           |    |
| liquid                               |           |    |
| <b>Colour</b>                        |           |    |
| colourless, clear                    |           |    |
| <b>Odour</b>                         |           |    |
| odourless                            |           |    |
| <b>pH value</b>                      |           |    |
| Value                                | 8.3       |    |
| Reference temperature                | 20        | °C |
| <b>Boiling point / boiling range</b> |           |    |
| Value                                | appr. 100 | °C |
| <b>Melting point/freezing point</b>  |           |    |
| No data available                    |           |    |

**Trade name:** DNA-500 Buffer OEM (50pcs)**Product no.:** 292-36150-91**Current version :** 3.0.0, issued: 18.08.2022**Replaced version:** 2.0.0, issued: 17.07.2018**Region:** GB

|  |         |
|--|---------|
| <b>Decomposition temperature</b>                         |         |
| No data available  |         |
| <b>Flash point</b>                                       |         |
| Not applicable   |         |
| <b>Ignition temperature</b>                              |         |
| No data available  |         |
| <b>Flammability</b>                                      |         |
| No data available  |         |
| <b>Lower explosion limit</b>                             |         |
| No data available  |         |
| <b>Upper explosion limit</b>                             |         |
| No data available  |         |
| <b>Vapour pressure</b>                                   |         |
| No data available  |         |
| <b>Relative vapour density</b>                           |         |
| No data available  |         |
| <b>Relative density</b>                                  |         |
| No data available  |         |
| <b>Density</b>   |         |
| No data available  |         |
| <b>Solubility in water</b>                               |         |
| Comments   | soluble |
| <b>Solubility</b>  |         |
| No data available  |         |
| <b>Partition coefficient n-octanol/water (log value)</b> |         |
| No data available  |         |
| <b>Kinematic viscosity</b>                               |         |
| No data available  |         |
| <b>Particle characteristics</b>                          |         |
| No data available  |         |

**9.2 Other information**

|                          |  |
|--------------------------|--|
| <b>Other information</b> |  |
| No data available.       |  |

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No data available.

**10.2 Chemical stability**

Stable if stored and handled properly.

**10.3 Possibility of hazardous reactions**

No data available.

**10.4 Conditions to avoid**

No data available.

**10.5 Incompatible materials**

Oxidizing agents

**10.6 Hazardous decomposition products**

No data available.

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

|                            |                                   |
|----------------------------|-----------------------------------|
| <b>Acute oral toxicity</b> |                                   |
| <b>No</b>                  | <b>Product Name</b>               |
| <b>1</b>                   | <b>DNA-500 Buffer OEM (50pcs)</b> |
| LD50                       | 2.660 - 5.140 mg/kg               |

**Trade name:** DNA-500 Buffer OEM (50pcs)**Product no.:** 292-36150-91**Current version :** 3.0.0, issued: 18.08.2022**Replaced version:** 2.0.0, issued: 17.07.2018**Region:** GB

|  |                            |
|--|----------------------------|
| Species                                  | rat                        |
| Reference substance                      | boric acid                 |
| <b>Acute dermal toxicity</b>             |                            |
| No data available                        |                            |
| <b>Acute inhalational toxicity</b>       |                            |
| No data available                        |                            |
| <b>Skin corrosion/irritation</b>         |                            |
| <b>No</b>                                | <b>Product Name</b>        |
| 1  | DNA-500 Buffer OEM (50pcs) |
| Reference substance                      | boric acid                 |
| Evaluation                               | irritant                   |
| <b>Serious eye damage/irritation</b>     |                            |
| <b>No</b>                                | <b>Product Name</b>        |
| 1  | DNA-500 Buffer OEM (50pcs) |
| Reference substance                      | boric acid                 |
| Evaluation                               | irritant                   |
| <b>Respiratory or skin sensitisation</b> |                            |
| No data available                        |                            |
| <b>Germ cell mutagenicity</b>            |                            |
| No data available                        |                            |
| <b>Reproduction toxicity</b>             |                            |
| No data available                        |                            |
| <b>Carcinogenicity</b>                   |                            |
| No data available                        |                            |
| <b>STOT - single exposure</b>            |                            |
| No data available                        |                            |
| <b>STOT - repeated exposure</b>          |                            |
| No data available                        |                            |
| <b>Aspiration hazard</b>                 |                            |
| No data available                        |                            |

**11.2 Information on other hazards****Endocrine disrupting properties**

No data available.

**Other information**

Exercise customary precautions when handling chemicals.

**SECTION 12: Ecological information****12.1 Toxicity**

|                                      |  |
|--------------------------------------|--|
| <b>Toxicity to fish (acute)</b>      |  |
| No data available                    |  |
| <b>Toxicity to fish (chronic)</b>    |  |
| No data available                    |  |
| <b>Toxicity to Daphnia (acute)</b>   |  |
| No data available                    |  |
| <b>Toxicity to Daphnia (chronic)</b> |  |
| No data available                    |  |
| <b>Toxicity to algae (acute)</b>     |  |
| No data available                    |  |
| <b>Toxicity to algae (chronic)</b>   |  |
| No data available                    |  |
| <b>Bacteria toxicity</b>             |  |
| No data available                    |  |

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

**Trade name:** DNA-500 Buffer OEM (50pcs)**Product no.:** 292-36150-91**Current version :** 3.0.0, issued: 18.08.2022**Replaced version:** 2.0.0, issued: 17.07.2018**Region:** GB

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

No data available.

**12.6 Endocrine disrupting properties**

No data available.

**12.7 Other adverse effects**

No data available.

**12.8 Other information****Other information**

Ecological data are not available.

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

**SECTION 14: Transport information****14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations.

**14.2 Transport IMDG**

The product is not subject to IMDG regulations.

**14.3 Transport ICAO-TI / IATA**

The product is not subject to ICAO-TI / IATA regulations.

**14.4 Other information**

No data available.

**14.5 Environmental hazards**

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

**14.6 Special precautions for user**

No data available.

**14.7 Maritime transport in bulk according to IMO instruments**

Not relevant

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

**REACH candidate list of substances of very high concern (SVHC) for authorisation**

The product contains following substance(s) meeting the criteria in Article 57 in association with Article 59 of the REACH regulation ((EC) 1907/2006) that are placed on the list of candidates considered for inclusion in annex XIV (substances subject to Authorisation).

| No | Substance name | CAS no.    | EC no.    |
|----|----------------|------------|-----------|
| 1  | boric acid     | 10043-35-3 | 233-139-2 |

**Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES**

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

| No | Substance name | CAS no. | EC no. | No |
|----|----------------|---------|--------|----|
|----|----------------|---------|--------|----|

**Trade name:** DNA-500 Buffer OEM (50pcs)**Product no.:** 292-36150-91**Current version :** 3.0.0, issued: 18.08.2022**Replaced version:** 2.0.0, issued: 17.07.2018**Region:** GB

|   |            |            |           |        |
|---|------------|------------|-----------|--------|
| 1   | boric acid | 10043-35-3 | 233-139-2 | 30, 75 |
| <b>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</b> |            |            |           |        |
| This product is not subject to Part 1 or 2 of Annex I.  |            |            |           |        |

**15.2 Chemical safety assessment**

No data available.

**SECTION 16: Other information****Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

**Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

H360FD

May damage fertility. May damage the unborn child.

**Creation of the safety data sheet**

UMCO GmbH

Georg-Wilhelm-Str. 187, D-21107 Hamburg

Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

**Alterations/supplements:**

Alterations to the previous edition are marked in the left-hand margin.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH.

Prod-ID 641954