

DNA-500 KIT ASSY (P/N 292-27910-91, 292-27910-10, 292-27910-30) includes
DNA-500 Separation Buffer and DNA-500 Marker solution.

Safety Data Sheet

Section 1: Identification of the substance or mixture and of the supplier

Product name: DNA-500 Marker solution
Name of supplier: Shimadzu Corporation
Address: 1 Nishinokyo-Kuwabaracho, Nakagyo-ku, Kyoto 604-8511, Japan
Section in charge: Clinical & Infectious Disease Testing Business Unit, Diagnostics Management Department
Telephone: +81-75-823-1351
FAX: +81-75-823-1364
Use of the product: This product is for analytical research use only.
Not applicable for clinical and/or diagnostic purposes.
Restricted to professional users.

Section 2: Hazard identification

GHS classification: Not Applicable for classification/ Not classified
GHS label elements: Not Applicable
Signal word: None
Hazard statements: -
Prevention: -
Response: -
Storage: -
Disposal: -

Section 3: Composition/information on ingredients

Substance/ mixture: Mixture
General description: Buffer solution including boric acid and tris(hydroxymethyl)aminomethane.
tris(hydroxymethyl)aminomethane (CAS No. 77-86-1) < 0.3 %
boric acid (CAS No. 10043-35-3) < 0.2 %
Other non-hazardous components < 0.1 %
Water (CAS No. 7732-18-5) Balance to 100 %

* The exact concentration of composition has been withheld as confidential business information.

Section 4: First-aid measures

Inhalation: Remove to uncontaminated area and supply fresh air. Promptly consult doctor, if needed.
Skin contact: Take off contaminated clothing and wash skin with plenty of water.
Eye contact: Flush eyes with plenty of water for at least 15 minutes, and obtain medical attention.
Ingestion: Drink plenty of water to induce vomiting, and obtain medical attention.

Section 5: Fire-fighting measures

Extinguishing media: Use water mist, foam, powder, carbon dioxide, dry sand.
Specific hazards arising from fire-fighting: Gases will form upon combustion of carbon monoxide, nitrogen oxides and boric oxides.
Special fire-fighting measures: In case of fire in the surrounding area, promptly move the container to a safe place.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate protective equipment.
Environmental precautions: Absorb as much of the material as possible with paper towel or sand.
Methods and materials for containment and cleaning up: Prevent leakage and soak up completely with absorbent material.

Section 7: Handling and storage

Handling: Wear personal protective equipment to prevent inhalation and the product from conducting eyes or skin.
Storage: Keep tightly closed in dark cool and well-ventilated place.

Section 8: Exposure controls/personal protection

Exposure limits:	No occupational exposure limit values and/or biological limit values are established.
Permitted concentration:	Japan Society for Occupational Health: Not established ACGIH: (Boric Acid) TWA 2mg/m ³ (I), STEL 6mg/m ³ (I)
Equipment measures:	Eyewash equipment
Respiratory protection:	Not required
Hand protection:	Wear impervious glove.
Eye protection:	Wear tightly sealed goggles.
Skin and body protection:	Wear laboratory coat.

Section 9: Physical and chemical properties

Physical state, color:	Colorless, transparent liquid
Odor	Odorless
Melting/ Freezing point:	No data available
Boiling point/ boiling range:	No data available
Flammability:	Not applicable
Lower/Upper explosion limit:	Not classified as explosive.
Flash point:	No data available
Auto-ignition temperature:	The product does not combust spontaneously.
Decomposition temperature:	No data available
pH:	8.3 at 20°C
Kinematic viscosity:	No data available
Solubility:	Readily soluble
Vapor pressure:	No data available
Density and/or relative density:	No data available
Relative vapor density:	No data available
Particle characteristics:	Not applicable

Section 10: Stability and reactivity

Reactivity:	No information available
Chemical stability:	Stable under standard ambient conditions.
Possibility of hazardous reactions:	Hazardous reaction has not been reported.
Conditions to avoid:	Avoid physical stress e.g., direct sunlight, excess heat, or electrostatic discharge.
Incompatible materials:	No information available
Hazardous decomposition products:	No information available

Section 11: Toxicological information

No data available for the mixture.

Additional toxicological information on boric acid:

Acute toxicity:	Not classified (Oral LD50 value of 2,660-5,140mg/kg, Rat)
Skin corrosion/irritation:	Not classified (At 24 and 72 hours, moderate irritation was noted.)
Serious eye damage/eye irritation:	Not classified (Unknown toxic components in the mixture: ≥0.1%)
Respiratory or skin sensitization:	Not classified due to insufficient data.
Germ cell mutagenicity:	Not classified due to insufficient data.
Carcinogenicity:	Not classified due to insufficient data.
Reproductive toxicity:	Not classified due to insufficient data.
Specific target organ toxicity (single exposure):	Not classified due to insufficient data.
Specific target organ toxicity (repeated exposure):	Not classified due to insufficient data.
Aspiration hazard:	Not classified (No kinematic viscosity data available.)

Section 12: Ecological information

No data available for the mixture.

Additional toxicological information on boric acid:

Toxicity:	Hazardous to the aquatic environment (acute): Not applicable for classification.
	Hazardous to the aquatic environment (chronic): Not applicable for classification.

Persistence and degradability:	No information available
Bioaccumulative potential:	No information available
Mobility in soil:	No information available
Other adverse effects:	Ozone depletion potential, photochemical ozone creation potential and/or global warming potential: Not classified (Not listed in Annexes of Montreal Protocol.)

Section 13: Disposal considerations

Residual waste:	Dispose of contents/ container according to all federal, state, and local environmental regulations.
Contaminated container:	After removing the contents, dispose of contents/ container according to all federal, state, and local environmental regulations.

Section 14: Transport information

US DOT, IMDG (sea), ADR/RID (land), ICAO/IATA (air): No classification assigned.
Prior to transport, make sure no leakage is observed from the bottle and stow a cargo without dropping and turning over.

Section 15: Regulatory information

U.S. TSCA Inventory: Boric acid
The composition/ information of ingredients is disclosed according to GHS. Comply with all countries, national and local regulation.

Section 16: Other information

References

- 1) National Institute of Technology and Evaluation: GHS; http://www.safe.nite.go.jp/ghs/ghs_index.html
- 2) National Institute of Technology and Evaluation: CHRIP; http://www.nite.go.jp/chem/chrip/chrip_search/systemTop
- 3) Ministry of Economy, Trade and Industry: GHS Mixture Classification System ver. 6.0 (According to GHS, sixth revised edition, 2015)

Revision

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Reason for revision: GHS ninth revised edition (JIS Z7253: 2025) compliant
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