

Part Number: DR027

Veratox for Gentamicin

This is a diagnostic test kit that is comprised of several individual components, each of which may have its own Safety Data Sheet. If a component does not have a Safety Data Sheet included here the item falls under Hazard Communication [1910.1200(b)(6)], *Articles*, and does not require a Safety Data Sheet.

For any questions please contact Neogen Corporation.

The following Safety Data Sheets are included in this file:

Veratox for Gentamicin

Stop Buffer

Veratox 1X Gentamicin Balance Buffer

Veratox 10X Gentamicin Extraction Buffer A

SECTION 1 – IDENTIFICATION OF PRODUCT AND COMPANY INFORMATION

1.1 Product identifier

Product name: : Veratox for Gentamicin

Catalog number : DR027

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

No further relevant information available.

Application of the product / the preparation : *In vitro*

1.3 Details of the supplier of the safety data sheet

Company : Neogen Corporation
620 Leshar Place
Lansing, MI 48912

Emergency Telephone : 1-517-372-9200

Technical Telephone : 1-800-234-5333

Fax : 1-517-372-0108

Email address : foodsafety@neogen.com

Website : www.neogen.com

1.4 Emergency telephone number:

Emergency phone number: For incidents with hazardous and/or dangerous materials such as accidents, spills, leaks, fire or exposure call CHEMTREC: USA/Canada: 1-800-424-9300, Customer number (CNN) 669057.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS-US classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Toxicity (Category 4, Oral), H302
Eye Damage (Category 1), H318
Metal Corrosion (Category 1). H290
Skin Corrosion (Category 1B), H314
Specific Target Organ Toxicity, Single Exposure (STOT, SE) (Category 3), H335
Aquatic Acute toxicity (Category 3), H402

SECTION 2: HAZARDS IDENTIFICATION (continued)

2.2 GHS Label Elements, including precautionary statements

Pictogram



Signal word (GHS-US)

Danger

Hazard statements (GHS-US):

H314

Causes severe skin burns and eye damage

H402

Harmful to Aquatic Life

Precautionary statements (GHS-US):

P260

Do not breathe mist, vapors, spray

P264

Wash exposed skin thoroughly after handling

P280

Wear protective gloves, eye protection, protective clothing, 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

P304+P340

If inhaled: remove person to fresh air and keep comfortable for breathing

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

P363

Wash contaminated clothing before reuse

P405

Store locked up

P501

Dispose of contents/container to comply with local, state and federal regulations.

2.3 Other hazards

Hazards not contributing to the classification: None.

2.4 Unknown acute toxicity (GHS US)

No data available.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS#	SARA 313
Gentamicin-coated Plate	NONE	NO
Gentamicin Standards	NONE	NO
Gentamicin Antibody #1	NONE	NO
100X HRP-Conjugated Antibody #2	NONE	NO
Antibody #2 Diluent	NONE	NO
10X Sample Extraction Buffer	NONE	NO
20X Wash Solution	NONE	NO
Stop Buffer	7647-01-0	NO
TMB Substrate	NONE	NO
10X Gentamicin Extraction Buffer A	NONE	NO
1X Gentamicin Balance Buffer	NONE	YES

Refer to component MSDS for additional information

SECTION 4 – FIRST AID MEASURES

Oral Exposure

If swallowed, wash out mouth with water. Call a physician.

Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 5 minutes.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 10 minutes. Call a physician.

Refer to component MSDS for additional information

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point	N/A
Auto Ignition	N/A
Flammability	N/A
Extinguishing media	Suitable media: Water Spray, Carbon Dioxide, Dry Chemical Powder, or Appropriate Foam

Refer to component MSDS for additional information

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Methods for Cleaning Up

Wash spill site with soap solution. Flush spill area with copious amounts of water.

Place in appropriate container. Avoid raising dust.

Refer to component MSDS for additional information

SECTION 7 – HANDLING AND STORAGE

Handling

The Stop Buffer contains 0.75 N HCl. When handling these reagents use particular care to avoid contact with eyes and skin and to avoid inhalation of vapor or mist. No other components pose a significant risk.

Storage

Store at 2-8°C. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Refer to component MSDS for additional information

SECTION 8 – EXPOSURE CONTROLS/PPE

Personal Protective Equipment

Wear chemical-resistant gloves, safety goggles, other protective clothing. Refer to component MSDS for additional information

SECTION 9 – PHYSICAL/CHEMICAL PROPERTIES

pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Auto ignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

SECTION 10 – STABILITY AND REACTIVITY

Stability : Stable
Hazardous Exothermic Reactions : Will not occur.

Refer to component MSDS for additional information

SECTION 11 – TOXICOLOGICAL INFORMATION

Refer to component MSDS

SECTION 12 – ECOLOGICAL INFORMATION

Refer to component MSDS

SECTION 13 – DISPOSAL CONSIDERATIONS

Appropriate Method of Disposal of Substance or Preparation

Small amounts may be washed down the drain with excess water. Observe all federal, state, and local environmental regulations.

Refer to component MSDS for additional information

SECTION 14 – TRANSPORT INFORMATION

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

SECTION 15 – REGULATORY INFORMATION

United States Regulatory Information

SARA Listed: no

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL : No

NDSL : No

Refer to component MSDS for additional information

SECTION 16 – OTHER INFORMATION

Kit Components	Part number	Safety Information
Stop Solution	10002032	Acute Toxicity: 4 (Oral), H302 Skin Corr. :1B, H314 Eye Dam: 1, H318 Organ Toxicity, Single Exposure: 3, H335
10X Gentamicin Extraction Buffer A	1027006	Corr.: 1A; Eye Dam.: 1; Aquatic Acute Toxicity: 1; Aquatic Chronic Toxicity: 1; H314, H410
1X Gentamicin Balance Buffer	1027007	Metal Corrosion: 1; Skin Corr.: 1A; Eye Dam.: 1; Aquatic Acute Toxicity: 3; H290, H314, H318, H402
Gentamicin-Coated Plate	N/A	Non-Hazardous
Gentamicin Standards	N/A	Non-Hazardous
Gentamicin Antibody #1	N/A	Non-Hazardous
100X HRP-Conjugated Antibody #2	N/A	Non-Hazardous
Antibody #2 Diluent	N/A	Non-Hazardous
20X Wash Solution	1000202	Non-Hazardous
TMB Substrate	1000204	Non-Hazardous

DISCLAIMER

For Research use only. Not for Drug, Clinical Diagnostics or other uses.

Date of Preparation: April 2016
Revision: Rev.0
Replaces: New issue

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

SECTION 1: IDENTIFICATION OF PRODUCT AND COMPANY INFORMATION

1.1 Product identifier

Product name : Stop Buffer

Part number : N/A

1.2 Relevant identified uses of the substance or mixture

For use with Veratox kits

Application of the substance / the preparation : *In vitro*

1.3 Details of the supplier of the safety data sheet

Company : Neogen Corporation
620 Leshar Place
Lansing, MI 48912

Emergency Telephone : 1-517-372-9200

Technical Telephone : 1-800-234-5333

Fax : 1-517-372-0108

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1.4 Emergency telephone number:

Emergency phone number: For incidents with hazardous and/or dangerous materials such as accidents, spills, leaks, fire or exposure call CHEMTREC: USA/Canada: 1-800-424-9300, Customer number (CNN) 669057.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS-US classification in accordance with 29 CFR 1910 (OSHA HCS)

Met. Corr.: (Category 1), H290

Acute Toxicity (Oral): 4 (H302)

Skin Corr.: 1B (H314)

Eye Dam.: 1 (H318)

Specific Target Organ Toxicity, Single Exposure (STOT SE): 3 (H335):

Respiratory tract irritation.

See section 2.2 for full H-statements

SECTION 2: HAZARDS IDENTIFICATION (continued)

2.2 GHS Label Elements, including precautionary statements

Pictogram



Signal word (GHS-US)	Warning
Hazard statements (GHS-US): H314 + H318	Causes severe skin burns and serious eye damage
H290	May be corrosive to metals
H335	May cause respiratory irritation
H402	Harmful to aquatic life
Precautionary statements (GHS-US):	
P234	Keep only in original container
P260	Do not breathe mist, vapors, spray
P264	Wash exposed skin thoroughly after handling
P280	Wear protective gloves, eye protection, protective clothing, face protection
P301+P330+P331	If swallowed: rinse mouth. Do not induce vomiting
P303+P361+P353	If on skin (or hair): rinse skin with water/shower
P304+P340	If inhaled: remove person to fresh air and keep comfortable for breathing
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
P363	Wash contaminated clothing before reuse
P390	Absorb spillage to prevent material damage
P406	Store in corrosive resistant steel container with resistant liner
P501	Dispose of contents/container to comply with local, state and federal regulations.

2.3 Other hazards

Hazards not contributing to the classification: None.

2.4 Unknown acute toxicity (GHS US)

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization:

CAS#	Chemical Name	Percent (w/w)	GHS-US classification
7732-18-5	Water	97.26	Not classified
7647-01-0		2.73	Acute Toxicity (Oral): 4 (H302) Skin Corr.: 1B (H314) Eye Dam.: 1 (H318) STOT SE: 3 (H335)

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

If inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Immediately call a poison center or doctor/physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do and continue rinsing. Consult a physician.

If swallowed: Rinse mouth with water. Do not induce vomiting. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important know symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas

5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See section 8: Exposure controls and personal protection and section 13: disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation of vapor and mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Container which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

OSHA Occupational Exposure limits: 5 ppm or 7mg/m³

8.2. Exposure controls

Appropriate engineering controls

Handle in accordance with good industry hygiene and safety practice. Wash hands before breaks and at the end of workday.

Eye Protection

Eye glasses with side protection.

Skin Protection

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Hand Protection

Use protective Nitrile gloves that provides comprehensive protection. Adhere to manufacturer listed break through times.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION **(continued)**

Respiratory protection
Not needed for normal use.

Control of environmental exposure
Do not let product enter drains

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Molecular mass (HCl)	36.46 g/mol
Color	Colorless
Odor	Odorless
Odor threshold	No data available
pH	0
Relative evaporation rate (butylacetate=1):	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	110°C (230°F)
Flash point	Not applicable
Self-ignition temperature	Does not ignited
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	23 hPa (17mmHg) at 20°C (68°F)
Relative vapor density at 20 °C	No data available
Relative density	No data available
Solubility	Completely miscible. Soluble in water. Soluble in ethanol. Soluble in methanol.
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	Not explosive
Oxidizing properties	None
Explosive limits	No data available

9.2 Other safety information
No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Thermal decomposition generates Corrosive vapors.

SECTION 10: STABILITY AND REACTIVITY (continued)

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Reacts violently with some bases. Releases of heat.

10.4 Conditions to avoid

Direct sunlight; extremely high or low temperatures.

10.5 Incompatible materials

Metals, cyanides and strong bases.

10.6 Hazardous decomposition products

Thermal decomposition generates corrosive vapors. In the event of fire see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Absorbed through dermal contact, eye contact, inhalation and ingestion.

Toxicity

May cause damage to the following organs: upper respiratory tract, skin, eyes.
May affect the liver and sensory organs. May affect behavior, the cardiovascular system, and urinary system

Ingestion

Causes irritation and possible burns of the respiratory tract and mucous membranes.
May be harmful if swallowed. Causes irritation with vomiting, nausea, diarrhea, pain.
May cause burning of the gastrointestinal tract. Can cause nausea and vomiting.

Skin

Causes severe skin irritation and burns. May be absorbed through skin in harmful amounts.

Eyes

Causes severe eye irritation and burns. May cause irritation of the conjunctiva or blindness

Carcinogenicity

IARC: Classified 3. Not classifiable as to its carcinogenicity to humans.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Additional Information

Ingestion of large amounts may cause: local irritation. Avoid release to the environment.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not established

12.2 Persistence and degradability

Not established.

12.3 Bioaccumulative potential

Not established

12.4 Mobility in soil

May be harmful to plant growth, blooming and fruit formation.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

May be harmful to aquatic organisms due to shift of the pH

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal recommendations

Dispose in a safe manner in accordance with local/national regulations.
Avoid release to the environment.

Contaminated packaging

Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

DOT (US)/ IMDG/ IATA/ADR/RID

UN number: 1789 Class 8 Packing group: III



DOT Special Provisions (49 CFR 172.102)

Must be packed with absorbent material in a tightly closed metal non-metal lined receptacle.

SECTION 15: REGULATION INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313

	CAS-No.	Revision Date
Hydrochloric acid	7647-01-0	1993-04-24

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right to Know Components

	CAS-No.	Revision Date
Hydrochloric acid	7647-01-0	1993-04-24

Pennsylvania Right to Know Components

	CAS-No.	Revision Date
Water	7732-18-5	
Hydrochloric acid	7647-01-0	1993-04-24

New Jersey Right to Know Components

	CAS-No	Revision Date
Water	7732-18-5	
Hydrochloric acid	7647-01-0	1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

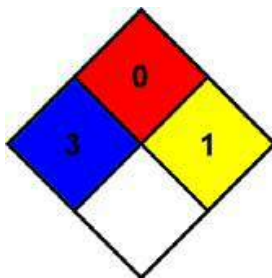
SECTION 16: OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3

Eye Dam.	Serious eye damage
Met. Corr.	Corrosive to metals
Skin Corr.	Skin Corrosion
STOT SE	Specific target organ toxicity – single exposure

SECTION 16: OTHER INFORMATION (continued)

NFPA Health Hazard



NFPA health hazard 3: Short exposure could cause serious temporary or residual injury even though prompt medical attention was given

NFPA fire hazard 0: Materials that will not burn

NFPA reactivity 1: Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.

HMIS III Rating

Health 3: Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability 0: Minimal Hazard

Physical 1: Slight Hazard

Personal Protection C

DISCLAIMER

For Research use only. Not for Drug, Clinical Diagnostics or other uses.

Date of Preparation: April 2016
 Revision: Rev.0
 Replaces: New issue

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SECTION 1: IDENTIFICATION OF PRODUCT AND COMPANY INFORMATION

1.1 Product identifier

Product name : Veratox 1X Gentamicin Balance Buffer

Part number : DR027

1.2 Relevant identified uses of the substance or mixture

For use with Veratox Gentamicin ELISA Test Kits (DR027)

Application of the substance / the preparation : *In vitro*

1.3 Details of the supplier of the safety data sheet

Company : Neogen Corporation
620 Leshar Place
Lansing, MI 48912 USA

Emergency Telephone : 1-517-372-9200

Technical Telephone : 1-800-234-5333

Fax : 1-517-372-0108

Email address : foodsafety@neogen.com

Website : www.neogen.com

1.4 Emergency telephone number:

Emergency phone number: For incidents with hazardous and/or dangerous materials such as accidents, spills, leaks, fire or exposure call CHEMTREC: USA/Canada: 1-800-424-9300, Customer number (CNN) 669057.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS-US classification in accordance with 29 CFR 1910 (OSHA HCS)

Met. Corr.: (Category 1), H290

Acute Toxicity (Oral): Category 4 (H302)

Skin Corr.: Category 1B (H314)

Eye Dam.: Category 1 (H318)

Acute aquatic toxicity: Category 1(H402)

See section 2.2 for full H-statements

SECTION 2: HAZARDS IDENTIFICATION (continued)

2.2 GHS Label Elements, including precautionary statements

Pictogram



Signal word (GHS-US)

Danger

Hazard statements (GHS-US):

H290

May be corrosive to metals

H314 + H318

Causes severe skin burns and serious eye damage

H402

Harmful to aquatic life

Precautionary statements (GHS-US):

P234

Keep only in original container

P260

Do not breathe mist, vapors, spray

P264

Wash exposed skin thoroughly after handling

P273

Avoid release to the environment

P280

Wear protective gloves, eye protection, protective clothing, 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

P304+P340

If inhaled: remove person to fresh air and keep comfortable for breathing

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

P363

Wash contaminated clothing before reuse

P405

Store locked up

P406

Store in corrosive resistant stainless steel container with a resistant inner liner

P501

Dispose of contents/container to comply with local, state and federal regulations.

2.3 Other hazards

Hazards not contributing to the classification: None.

2.4 Unknown acute toxicity (GHS US)

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization:

CAS#	Chemical Name	Percent (w/w)	GHS-US classification
7732-18-5	Water	80-99%	Not classified
1310-73-2	Sodium Hydroxide	1-20%	Metal Corrosion: 1; Skin Corr.: 1A; Eye Dam.: 1; Aquatic Acute Toxicity: 3; H290, H314, H318, H402

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

If inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Immediately call a poison center or doctor/physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do and continue rinsing. Consult a physician.

If swallowed: Rinse mouth with water. Do not induce vomiting. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

Carbon oxides and sodium oxides. Thermal decomposition generates corrosive vapors.

SECTION 5: FIREFIGHTING MEASURES

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not use water to attempt to put out the fire.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

See section 8: Exposure controls and personal protection and section 13: disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Precautions for safe handling Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray. Provide appropriate exhaust ventilation at places where dust is formed

Hygiene measures: Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.

Storage conditions: Keep only in the original container in a cool, well ventilated place away from incompatible materials. Keep container closed when not in use.

Incompatible products: Metals, cyanides and strong bases.

SECTION 7: HANDLING AND STORAGE

Incompatible materials: Direct sunlight.

Packaging materials: Do not store in corrodible metal.

7.3 Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure control parameters OSHA states exposure limit for concentrated Sodium Hydroxide is 2 mg/m³

8.2. Exposure controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Avoid all unnecessary exposure.
Skin: Wear nitrile or rubber gloves, apron or lab coat.

Eye protection: Chemical goggles or face shield.
Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Wear appropriate mask.

Other information: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Molecular mass (NaOH):	39.997 g/mol
Color:	Colorless
Odor:	Odorless
Odor threshold:	No data available
pH:	14
Relative evaporation rate (butylacetate=1)	No data available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Melting point/freezing point	-12-10°C (10-50°F)
Initial boiling point and boiling range	105 - 140°C (221-274°F)
Flash point	No data available
Self-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	< 24hPa (<18mmHg) at 20°C (68°F)
Relative vapor density at 20 °C	1.38 –(Air =1.0)
Relative density	1.327g/cm ³ at 25°C (77°F)
Solubility	Completely miscible, soluble
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	Not applicable
Oxidising properties	None
Explosive limits	No data available

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Water, acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc

10.6 Hazardous decomposition products

Other decomposition products. No data available In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Absorbed through dermal contact, eye contact, inhalation and ingestion. Material is extremely destructive to tissue of mucous membranes and upper respiratory tract, eyes and skin.

Toxicity

May cause damage to the following organs: upper respiratory tract, skin, eyes. May affect the liver and sensory organs. May affect behavior, the cardiovascular system, and urinary system

Ingestion

Causes irritation and possible burns of the respiratory tract and mucous membranes. May be harmful if swallowed. Causes irritation with vomiting, nausea, diarrhea, pain. May cause burning of the gastrointestinal tract. Can also cause coughing, wheezing, laryngitis, shortness of breath, inflammation and edema of the larynx and bronchi.

Skin

Causes severe skin irritation and burns. May be absorbed through skin in harmful amounts.

Eyes

Causes severe eye irritation and burns. May cause irritation of the conjunctiva or blindness

Carcinogenicity

IARC: Classified 3. Not classifiable as to its carcinogenicity to humans.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not established

12.2 Persistence and degradability

Not established.

12.3 Bioaccumulative potential

Not established

SECTION 12: ECOLOGICAL INFORMATION (continued)

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

Harmful to aquatic organisms due to shift of the pH. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal recommendations

Dispose in a safe manner in accordance with local/national regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product

Ecology - waste materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

DOT (US)/ IMDG/ IATA/ADR/RID

UN number: 1824 Class 8 Packing group: III



DOT Special Provisions (49 CFR 172.102)

Must be packed with absorbent material in a tightly closed metal non-metal lined receptacle.

SECTION 15: REGULATION INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313

	CAS-No.	Revision Date
Sodium Hydroxide	1310-73-2	2007-03-01

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right to Know Components

	CAS-No.	Revision Date
Sodium Hydroxide	1310-7-2	2007-03-01

Pennsylvania Right to Know Components

	CAS-No.	Revision Date
Water	7732-18-5	
Sodium Hydroxide	1310-73-2	2007-03-01

New Jersey Right to Know Components

	CAS-No.	Revision Date
Water	7732-18-5	
Sodium Hydroxide	1310-73-2	2007-03-01

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3

Eye Dam.	Serious eye damage
Met. Corr.	Corrosive to metals
Skin Corr.	Skin Corrosion
STOT SE	Specific target organ toxicity – single exposure

SECTION 16: OTHER INFORMATION (continued)**NFPA Health Hazard**

NFPA health hazard 3: Short exposure could cause serious temporary or residual injury even though prompt medical attention was given
NFPA fire hazard 0: Materials that will not burn
NFPA reactivity 0: Not reactive

HMIS III Rating

Health 3: Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability 0: Minimal Hazard
Physical 1: Slight Hazard

DISCLAIMER

For Research use only. Not for Drug, Clinical Diagnostics or other uses.

Date of Preparation: April 2016
Revision: Rev.0
Replaces: New issue

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

SECTION 1: IDENTIFICATION OF PRODUCT AND COMPANY INFORMATION

1.1 Product identifier

Product name : Veratox 10X Gentamicin Extraction
Buffer A

Part number : DR027

1.2 Relevant identified uses of the substance or mixture

For use with Veratox Gentamicin ELISA Test Kits (DR027)

Application of the substance / the preparation : *In vitro*

1.3 Details of the supplier of the safety data sheet

Company : Neogen Corporation
620 Leshar Place
Lansing, MI 48912

Emergency Telephone : 1-517-372-9200

Technical Telephone : 1-800-234-5333

Fax : 1-517-372-0108

Email address : foodsafety@neogen.com

Website : www.neogen.com

1.4 Emergency telephone number:

Emergency phone number: For incidents with hazardous and/or dangerous materials such as accidents, spills, leaks, fire or exposure call CHEMTREC: USA/Canada: 1-800-424-9300, Customer number (CNN) 669057.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS-US classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Corr.: Category 1B (H314)

Serious Eye Dam.: Category 1 (H318)

Acute aquatic toxicity: Category 1 (H400)

Chronic aquatic toxicity: Category 1 (H410)

See section 2.2 for full H-statements

SECTION 2: HAZARDS IDENTIFICATION (continued)

2.2 GHS Label Elements, including precautionary statements

Pictogram



Signal word (GHS-US)

Danger

Hazard statements (GHS-US):

H314 + H318

Causes severe skin burns and serious eye damage

H400

Very toxic to aquatic life

H410

Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US):

P260

Do not breathe mist, vapors, spray

P264

Wash exposed skin thoroughly after handling

P273

Avoid release to the environment

P280

Wear protective gloves, eye protection, protective clothing, 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

P304+P340

If inhaled: remove person to fresh air and keep comfortable for breathing

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

P321

Specific treatment (see supplemental first aid information)

P363

Wash contaminated clothing before reuse

P391

Collect spillage

P405

Store locked up

P501

Dispose of contents/container to comply with local, state and federal regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Vesicant: causes burns and destruction of tissue both internally and externally.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization:

CAS#	Chemical Name	Percent (w/w)	GHS-US classification
7732-18-5	Water	60-95%	Not classified
76-03-9	Trichloroacetic Acid (TCA)	5-40%	Corr.: 1A; Eye Dam.: 1; Aquatic Acute Toxicity: 1; Aquatic Chronic Toxicity: 1; H314, H410

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

If inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Immediately call a poison center or doctor/physician.

In case of skin contact: Remove contaminated clothing immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do and continue rinsing. Continue rinsing eyes during transport to the hospital.

If swallowed: Rinse mouth with water. Do not induce vomiting. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important know symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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: Alcohol-resistant foam, dry chemical, carbon dioxide, water spray or sand.

5.2 Special hazards arising from the substance or mixture

Carbon oxides and sodium oxides. Thermal decomposition generates corrosive vapors.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuated personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material and sweep up and shovel into container and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

See section 7: safe handling; section 8: Exposure controls and personal protection and section 13: disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures:

Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures:

Comply with applicable regulations.

Storage conditions:

Keep only in the original container in a cool, well ventilated place away from incompatible materials. Keep container closed when not in use. Keep from contact with oxidizing materials. Store below 40°C. Keep away from active metals.

7.3 Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure control parameters

OSHA states exposure limit for trichloroacetic acid (TCA) is 1ppm

8.2. Exposure controls

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Appropriate engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal protective equipment:	Avoid all unnecessary exposure.
Skin:	Wear nitrile or rubber gloves, apron or lab coat.
Eye protection:	Chemical goggles or face shield.
Skin and body protection:	Wear suitable protective clothing.
Respiratory protection:	Wear appropriate mask.
Other information:	Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	No data available
pH:	3-5
Relative evaporation rate (butylacetate=1)	No data available
Melting point/freezing point	Melting point/range: 54-58°C (129-136°F)
Initial boiling point and boiling range	196°C (385°F)
Flash point	>133°C (>235°F) – closed cup
Self-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	1 hPa (1mmHg) at 51°C (124°F) 1.6hPa (1.2mmHg) at 50°C (122°F)
Relative vapor density at 20 °C	5.64 –(Air =1.0)
Relative density	1.62g/cm ³ at 25°C (77°F)
Solubility	Completely miscible, soluble
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	Not applicable
Oxidizing properties	None
Explosive limits	No data available
Bulk density	900kg/m ³
Surface Tension	27.8mN/m at 80.2°C (176.4°F)

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Exposure to moisture and heat

10.5 Incompatible materials

Strong oxidizing agents, strong bases and amines

10.6 Hazardous decomposition products

Other decomposition products. No data available. In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Absorbed through dermal contact, eye contact, inhalation and ingestion. Material is extremely destructive to tissue of mucous membranes and upper respiratory tract, eyes and skin.

Toxicity

May cause damage to the following organs: upper respiratory tract, skin, eyes. May affect the liver and sensory organs. May affect behavior, the cardiovascular system, and urinary system

Ingestion

Causes irritation and possible burns of the respiratory tract and mucous membranes. May be harmful if swallowed. Causes irritation with vomiting, nausea, diarrhea, pain. May cause burning of the gastrointestinal tract. Can also cause coughing, wheezing, laryngitis, shortness of breath, inflammation and edema of the larynx and bronchi.

Skin

Causes severe skin irritation and burns. May be absorbed through skin in harmful amounts.

Eyes

Causes severe eye irritation and burns. May cause irritation of the conjunctiva or blindness

SECTION 11: TOXICOLOGICAL INFORMATION (continued)**11.2 Additional information****Acute Toxicity**

LD50 Oral –rat: 3320 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Eyes – rabbits

Results – severe eye irritation after 5 seconds

Respiratory or skin sensitization

No data available

Carcinogenicity

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans

NTP: No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

OSHA: No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA

IARC: 3-Group 3: Not classifiable as to its carcinogenicity to humans

Epidemiology: IARC has determined there is sufficient evidence for carcinogenicity to animals but limited evidence for carcinogenicity to humans.**Teratogenicity:** In pregnant rats: exposure caused birth defects relating to the musculoskeletal system and urogenital system.**Reproductive Effects:** Adverse reproductive effects have occurred in experimental animals.**Carcinogenicity**

IARC: Classified 3. Not classifiable as to its carcinogenicity to humans.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**Toxicity to Fish LC50 – Pimephales promelas (fathead minnow) –
2,000mg/l – 96 hoursToxicity to Daphnia and other EC50 – Daphnia magna (Water flea) -1,460 –
aquatic invertebrates 2,000mg/l – 48 hours**12.2 Persistence and degradability**

Biodegradability – Zahn- Wellens Test – Exposure time 27 days

12.3 Bioaccumulative potential

Not established

SECTION 12: ECOLOGICAL INFORMATION

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal recommendations

Dispose in a safe manner in accordance with local/national regulations. Offer surplus and non-recyclable solutions to a licensed disposal company Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product

Ecology - waste materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

DOT (US)/ IMDG/ IATA/ADR/RID

UN number: 1839 Class 8 Packing group: II



SECTION 15: REGULATION INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

SECTION 15: REGULATION INFORMATION (continued)

Massachusetts Right to Know Components

	CAS-No.	Revision Date
Trichloroacetic Acid	76-03-9	2007-03-01

Pennsylvania Right to Know Components

	CAS-No.	Revision Date
Water	7732-18-5	
Trichloroacetic Acid	76-03-9	2007-03-01

New Jersey Right to Know Components

	CAS-No.	Revision Date
Water	7732-18-5	
Trichloroacetic Acid	76-03-9	2007-03-01

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3

Eye Dam.	Serious eye damage
Met. Corr.	Corrosive to metals
Skin Corr.	Skin Corrosion
STOT SE	Specific target organ toxicity – single exposure

NFPA Health Hazard



NFPA health hazard

3: Short exposure could cause serious temporary or residual injury even though prompt medical attention was given

NFPA fire hazard NFPA reactivity

1: Slightly flammable
0: Not reactive

SECTION 16: OTHER INFORMATION (continued)

HMIS III Rating

Health	3: Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Chronic Health Hazard	*
Flammability	1: Slight Hazard
Physical	0: Minimal Hazard

DISCLAIMER

For Research use only. Not for Drug, Clinical Diagnostics or other uses.

Date of Preparation: April 2016
Revision: Rev.0
Replaces: New issue

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.