



Safety Data Sheet

Last Revised: 16/07/2021

1. IDENTIFICATION

Product name: **Buffer Sox1 of Sox DNA extraction kit**

Product use: Used as a component of Sox DNA Extraction Kit

Supplier: Metagenom Bio Life Science, 550 Parkside Dr Unit A9, Waterloo, ON N2L 5V4, Canada,
(844)973-4363

Manufacturer: Vivantis Technologies Sdn Bhd (A member of Revongen Corporation)
Level 1, Enterprise 2, Technology Park Malaysia, Lebuhraya Puchong-Sg Besi, 57000 Bukit Jalil,
Kuala Lumpur, Malaysia
+603-3359 1166

2. HAZARD IDENTIFICATION

This material is not a physical, health or environmental hazard.

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

Potential health effects:

Eyes: Short term harmful effects are not expected. Prolonged contact may cause eye irritation.

Skin: Not likely a hazard. Prolonged contact may cause irritation. Do not expose open cuts or wounds to the product.

Inhalation: Short term harmful effects are not expected. Prolonged inhalation may lead to respiratory tract irritation.

Ingestion: Not likely a hazard. Ingestion of large quantities may be harmful.

COMPOSITION/INGREDIENT INFORMATION

Substance / Mixture: Mixture

Substance Name: **Buffer Sox1 component 1 of Sox DNA extraction kit**



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Hazardous ingredients:

Chemical Name	CAS-No.	Concentration
Sodium dodecyl sulfate	151-21-3	>= 1% - <= 10%

FIRST AID MEASURES

Eye Contact First Aid: Flush immediately with plenty of water for at least 15 minutes while holding eyelids open to assure complete irrigation of eye and lid tissue. If irritation occurs or persists, seek medical attention.

Skin Contact First Aid: Wash with plenty of soap and water. If irritation occurs or persists, seek medical attention. Remove contaminated clothing and launder before reuse.

Inhalation First Aid: Move individual to fresh air. Seek medical attention if breathing difficulty develops.

Ingestion First Aid: Do not induce vomiting unless instructed to do so by qualified medical personnel. Unless advised otherwise dilute by drinking plenty of water. Seek medical attention if discomfort develops

FIRE-FIGHTING MEASURES

Flashpoint: None

Auto-ignition Temperature: Not determined

Explosive limits: LEL: not applicable UEL: not applicable

Extinguishing Media: Use media suitable for surrounding fire

Unusual Fire or Explosion hazards: None known

Hazardous Combustion Products: carbon oxides, sulfur oxides, nitrogen oxides (NO_x)

Fire Fighting Instructions: No special requirements

ACCIDENTAL RELEASE MEASURES

Large Spill: Contain Spill and recover for disposal

Small Spill: Spilled liquid may cause slippery residue on hard floors. Flush spill area with water to wash away and slippery residue.

HANDLING AND STORAGE

Storage: Store in original container in a cool, well-ventilated, dry area at temperature between 4°C and 25°C.



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Handling: Avoid contact with eyes. Do not wear contact lenses while handling this product. Use in well ventilated areas. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with skin.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved respirator. Special ventilation is not required for normal handling and use of this product when following the label requirements.

Skin Protection: Gloves should be worn to prevent repeated or prolonged contact with the liquid.

Eye Protection: Use safety glasses.

Note: After handling product practice general hygiene. Wash hands and face with soap and water before smoking, drinking or eating.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear liquid

Color: clear

Odor: odorless

Odor Threshold: No data available

pH: 7.0-8.5, (18 - 22 °C)

Melting point/range: ca. 0 °C

Boiling point/boiling range: ca. 100 °C

Flash point: No data available

Evaporation rate: No data available

Burning rate: No data available

Upper explosion limit: No data available

Lower explosion limit: No data available

Vapor pressure: No data available



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Relative vapor density: No data available

Relative density: No data available

Density: ca. 1 g/cm³

Solubility(ies)

Water solubility: soluble

Solubility in other solvents: No data available

Partition coefficient: n-octanol/water: No data available

Autoignition temperature: No data available

Decomposition temperature: No data available

Viscosity

Viscosity, dynamic: No data available

Viscosity, kinematic: No data available

Explosive properties: No data available

Oxidizing properties: No data available

STABILITY AND REACTIVITY

Stability: Stable if stored as directed. Hazardous decomposition products formed during fire

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Oxides of Carbon , sulfur oxides, nitrogen oxides

Incompatibility: no data available

TOXICOLOGY INFORMATION

Oral: May cause stomach irritation.

Dermal: Not expected but may cause irritation.

Inhalation: Not expect but inhalation may cause airway irritation.

Acute toxicity Not classified based on available information.

Product:



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Acute oral toxicity: No data available

Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available

Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Ingredients:

sodium dodecyl sulfate:

Acute oral toxicity: LD50 Oral (Rat): 1,228 mg/kg

Acute inhalation toxicity: LC50 (Rat): 3.9 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Acute dermal toxicity: LD50 Dermal (Rabbit): 580 mg/kg

Skin corrosion/irritation Not classified based on available information.

Product:

Remarks:

May cause skin irritation and/or dermatitis.

Ingredients:

sodium dodecyl sulfate:

Species: Rabbit

Exposure time: 24 h

Result: Irritating to skin.

Serious eye damage/eye irritation



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Not classified based on available information.

Product:

Remarks:

The product causes irritation of eyes, skin and mucous membranes.

Ingredients:

sodium dodecyl sulfate:

Species: Rabbit

Result: Risk of serious damage to eyes.

Method: OECD Test Guideline 405

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

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

NTP

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

Reproductive toxicity

Not classified based on available information.



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STOT-single exposure

Not classified based on available information.

Ingredients:

sodium dodecyl sulfate:

Routes of exposure: Inhalation

Assessment: May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

No data available

ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish: No data available

Toxicity to algae: No data available

Toxicity to bacteria: No data available

Ingredients: sodium dodecyl sulfate:

Toxicity to fish: NOEC (*Oncorhynchus mykiss* (rainbow trout)): 19.5 mg/l

Exposure time: 96 h

LC50 (*Oncorhynchus mykiss* (rainbow trout)): 3.6 mg/l

Exposure time: 96 h

Toxicity to algae: (*Pseudokirchneriella subcapitata* (green algae)): 2.68 mg/l

Exposure time: 150 h

Test Type: Growth inhibition



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Persistence and degradability

No data available

Bioaccumulative potential

Product:

Bioaccumulation: No data available

Ingredients:

sodium dodecyl sulfate:

Partition coefficient: n-octanol/water: log Pow: 1.6

Mobility in soil: No data available

Other adverse effects

Product:

Ozone-Depletion Potential: Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information: No data available

DISPOSAL CONSIDERATIONS

Dispose of unused product and waste effluents in accordance with provincial/state and local waste disposal regulations. Chemical additions or other alterations of this product may invalidate any disposal information in this safety data sheet. Consult local waste regulators for proper disposal.

TRANSPORT INFORMATION

This product is not regulated as a hazardous material for transportation within US and Canada by any means of transportation SECTION 14. TRANSPORT INFORMATION

UNRTDG

Not regulated as a dangerous good

IATA-DGR



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Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

REGULATORY INFORMATION

The information provided in this Material Safety Data Sheet has been compiled in good faith and is believed to be accurate. No warranty, expressed or implied regarding the completeness or continuing accuracy of the information contained herein, and Metagenom Bio Inc disclaims all liability for reliance thereon. It is users responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary to comply with all Federal, Provincial or State and Local laws and regulations.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: No SARA Hazards

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

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.

OTHER INFORMATION

List of Abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal



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Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

Prepared by: John Heil

This information may not be adequate for every application. The user should satisfy himself that he has all current data relevant to his particular use.