

Section 1- Identification

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|-----------------------------------|--|
| Product Name | Logix Smart Zika Virus Master Mix |
| Product Number | ZIKV-MM-003 |
| Application of the mixture | Laboratory Chemical |
| Manufacturer/Supplier | Co-Diagnostics, Inc. |
| Address | 2401 S. Foothill Dr. Ste. D |
| City, State, Zip, Country | Salt Lake City, Utah, 84109, USA |
| Technical Phone: | 1-801-683-8994 |
| Email: | info@codiagnostics.com |
| Emergency Phone: | 1-801-438-1036 |

Section 2- Hazard(s) Identification

Hazard Description: Product is NOT CLASSIFIED AS HAZARDOUS according to the Globally Harmonized System (GHS)

Label elements

GHS label elements *void*

Hazard pictograms *void*

Classification System:

NFPA Rating (scale 0-4):

Health: 1 Flammability: 1 Reactivity: 0

HMIS Rating (scale 0-4):

Health: 1 Flammability: 1 Reactivity: 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): *Not applicable*

Target Organ(s): *May cause Kidney damage (Nephrotoxin)*

Other hazards: *This mixture has not been tested to determine the overall health hazard; therefore in accordance with 29CFR1910.1200, the data reported above pertains to the hazardous ingredients of this mixture.*

Results of PBT and vPvB assessment: *Not applicable*

Section 3- Composition/information on ingredients

Chemical Characterization: Mixtures

Description: The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances. The exact concentration percentages of the hazardous substances are withheld as a Co-Diagnostics, Inc. trade secret.

Dangerous Components:

| | | |
|---------|--------------|--------|
| 57-50-1 | Sucrose,pure | 25-50% |
| 56-81-5 | Glycerol | 50-75% |

Non-Hazardous Components:

| | | |
|-----------|--|-----|
| 7732-18-5 | water | 99% |
| 1185-53-1 | 2-Amino-2-(hydroxymethyl)-1,3-propanediolhydrochloride | |
| 7647-14-5 | sodium chloride | |
| 7786-30-3 | magnesium chloride | |
| 7783-20-2 | ammonium sulphate | |
| N/A | Oligodeoxyribonucleic acid, unmodified | |
| N/A | Non-radioactive modification | |

Additional information: For the wording of the listed risk phrases refer to section 15.

Section 4- First Aid Measures

General information: No special measure required.

After inhalation: Supply fresh air; get medical attention.

After skin contact: Generally the product does not irritate the skin. Remove contaminated clothing. Flush affected area with water then wash with soap or mild detergent and water. If irritation is present, get medical attention.

After eye contact: Rinse opened eye for at least 15 minutes under running water. If irritation is present, get medical attention.

After swallowing: Get medical attention.

Information for doctor:

There is no specific antidote. Treat symptomatically and supportively.

Section 5- Fire Fighting Measures

Extinguishing media

Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment: No special measures required

Advice for firefighters: None

Protective equipment: None required.

Section 6- Accidental Release Measures

Person-related safety precautions: Wear appropriate protective clothing and chemically compatible gloves. Place spillage in appropriate container for waste disposal.

Environmental precautions: Dilute with plenty of water. Do not allow to enter sewers/surface or ground water.

Measures for containment and clean-up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Wash contaminated clothing before reuse.

Reference to other sections: No dangerous substances are released. See section 7 for information on safe handling. See section 13 for disposal information.

Section 7- Handling and Storage

Handling

User Exposure: Observe all federal, state, and local regulations. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep containers tightly closed. Use good laboratory practices for handling and storage of chemical substances.

Information about protection against fires and explosions: No special measures required.

Storage

Requirements to be met by storerooms and receptacles: Keep container tightly closed. Store at 4°C for use <5 days or long term at -20° or below.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s): No relevant information available.

Section 8- Exposure Controls/Personal Protection

Control Parameters:

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| Components with limit values that require monitoring at the workplace: | |
| 57-50-1 sucrose, pure | |
| PEL () | Long-term value: 15*5**mg/m ³ *total dust **respirable fraction |
| REL () | Long-term value: 10* 5**mg/m ³ *total dust **respirable fraction |
| TLV () | Long-term value: 10mg/m ³ |
| | |
| 56.81-5 glycerol | |
| PEL | Long-term value: 15*5**mg/m ³ Mist; *total dust **respirable fraction |

| | |
|-----|--|
| TLV | TLV withdrawn-insufficient data human occup.exp. |
|-----|--|

Additional information: The lists that were valid during the creation were used as basis.

Exposure Controls

Personal Protective Equipment:

General protective and hygienic measures: Use good laboratory practices for handling chemical substances of unknown toxicity.

Breathing equipment: Not required.

Protection of Hands: Protective gloves. Selection of the glove material should consider the penetration times, rates of diffusion and degradation.

Eye Protection: Wear splash proof or dust resistant goggles.

Section 9- Physical and Chemical Properties

General Information

Physical State: Fluid

Color: Colorless

Odor: Characteristic

pH-value at 20°C (68°F): 7-8.5

Change in Condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash point: >100°C (>212°F)

Flammability (solid, gaseous): Not applicable.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Product is not self-igniting

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure at 20°C (68°F): Not determined

Density: Not determined

Relative density: Not determined

Vapor density: Not determined

Evaporation rate: Not determined

Solubility in/Miscibility with Water: Fully miscible.
Partition coefficient (n-octanol/water): Not determined
Viscosity:
Dynamic: Not determined
Kinematic: Not determined

Organic solvents: 50.6-62.5%
Water: 47.5-100%

Solids content: 0.1-56.3%
Other information: No further relevant information available.

Section 10- Stability and Reactivity

Reactivity No further information available

Chemical stability

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known.

Conditions to avoid: No information available.

Incompatible materials: No information available.

Dangerous products of decomposition: No dangerous decomposition products known.

Section 11- Toxicological Information

Acute toxicity:

LD-LC50 values that are relevant for classification: No data available.

Route of Exposure:

Skin Contact: Possible irritant.

Eye Contact: Irritating effect.

Ingestion: Possible irritant.

Additional toxicological information: This product is not subject to classification according to internally approved calculation methods for preparations. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenic categories

| | |
|---|-------------------------------------|
| LARC (International Agency for Research on Cancer) | None of the ingredients are listed |
| NTP (National Toxicology Program) | None of the ingredients are listed |
| OASH-Ca (Occupational Safety & Health Administration) | None of the ingredients are listed. |

Section 12- Ecological Information

Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

Persistence and degradability: Not available.

Behavior in environmental systems:

Bioaccumulative potential: Not known

Mobility in soil: No information available.

Ecotoxicological effects:

Remark: Not available.

Additional information:

General notes: Water hazard class 1 (self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment: Not applicable.

Other adverse effects: No information available.

Section 13- Disposal Considerations

Waste treatment methods recommendation: Appropriate method of disposal of substance or preparation: Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional information.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

Section 14- Transport Information

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| UN-Number DOT, ADR, AND, IMDG, IATA | Not hazardous for transportation Void |
| UN proper shipping name DOT, ADR, AND, IMDG, IATA | None Void |
| Transport hazard class(es) DOT, ADR, AND, IMDG, IATA Class | None Void |
| Packing group DOT, ADR, IMDG, IATA | None Void |
| Environmental hazards Marine pollutant | No |
| Special precautions for user | Not applicable |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable |
| UN "Model Regulation" | Void |

Section 15-Regulatory information

SARA

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Specific toxic chemical listings): 7783-20-2 ammonium sulphate

TSCA (Toxic Substances Control Act): *All ingredients are listed.*

| | |
|-----------|--|
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| 7647-14-5 | sodium chloride |
| 7783-20-2 | ammonium sulphate |
| 7732-18-5 | water |
| 7786-30-3 | magnesium chloride |

Proposition 65:

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity: None of the ingredients are listed.

Carcinogenicity Categories:

EPA (Environmental Protection Agency): None of the ingredients are listed.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH): 57-50-1 sucrose, pure

MAK (German Maximum Workplace Concentration): None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients are listed.

National Regulations:

Water hazard class: Water hazard class I (Self-assessment): slightly hazardous to water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16- Other Information

The above information is believed to be correct based on our present knowledge and shall be used only as a guide. The information is applicable to the product with regard to appropriate safety precautions. This information does not guarantee the properties of the product and shall not establish a legally valid contractual relationship.

Co-Diagnostics, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See invoice or packing information for additional terms and conditions of sale.

Department issuing SDS:

Co-Diagnostics, Inc.
 Environmental Health and Safety Department
 2401 S. Foothill Drive, Ste. D
 Salt Lake City, UT 84019
 Phone: +1(801) 683-8994

Abbreviations and acronyms:

| | |
|--------|--|
| RID | Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) |
| ADR | Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) |
| IMDG | International Maritime Code for Dangerous Goods |
| DOT | US Department of Transportation |
| IATA | International Air Transport Association |
| ACGIH | American Conference of Governmental Industrial Hygienists |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| CAS | Chemical Abstracts Service (division of the American Chemical Society) |
| NFPA | National Fire Protection Association (USA) |
| HMIS | Hazardous Materials Identification System (USA) |
| LC50 | Lethal concentration, 50 percent |
| LD50 | Lethal dose, 50 percent |
| PBT | Persistent, Bioaccumulative and Toxic |
| vPvB | Very Persistent and very Bioaccumulative |
| NIOSH | National Institute for Occupational Safety |
| OSHA | Occupational Safety & Health |
| TLV | Threshold Limit Value |
| PEL | Permissible Exposure Limit |
| REL | Recommended Exposure Limit |