Immunology Consultants Laboratory, Inc.

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Immunology Consultants Laboratory, Inc. (ICL) Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifiers 1.1

ICL Name: Dengue NS1 Protein Type 1

ICL Catalog Number: AG55-0258, AG55-0258-Z

Product is neither a nanoform nor contains nanoforms. Product does not contain any animal by-products.

1.2 Product is to be used for research and manufacturing purposes. Product is for in vitro use only. Product is not for use in diagnostic applications. Product is not for animal or human consumption.

Immunology Consultants Laboratory, Inc. (ICL) 1.3 Supplier:

> 7150 SW Sandburg Street Address:

Portland, OR, 97223, USA

1.4 Emergency telephone number: 911 if in USA. Use relevant local phone number if outwith USA.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture 2.1

> This product is a mixture which has a component considered to be hazardous per Regulation (EC) No. 1272-2008 (CLP/GHS) and 29 CFR 1910/1200 (OSHA)

2.2 Label Elements





Signal Word: Danger

2.3 Other Hazards

Causes skin corrosion/irritation Category 2 Causes severe eye damage Category 1 May damage the unborn child Category 1B

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance 3.1

Not Applicable.

3.2 Mixtures

Component	CAS#	Percent in mixture		
Imidazole	288-32-4	≤ 5%		

4. FIRST AID MEASURES

Description of first aid measures

Ingestion: wash mouth with water provided person is conscious. Call a physician or poison control.

Inhalation Exposure: remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Skin Exposure: immediately flush for 15 minutes with copious amounts of water and wash with soap and water. Remove contaminated clothing and shoes. Call a physician if irritation or discomfort develops.

Eye Exposure: flush the eyes with copious amounts of water for at least 15 minutes. Remove contact lenses if present and flush for at least 15 minutes. Do not re-insert contact lenses. Assure adequate flushing by separating eyelids with fingers. Call a physician.

Most important symptoms and effects, acute and/or delayed 4.2

Eye contact can result in serious eye damage.

Skin contact can result in corrosion or irritation.

4.3 Indication of immediate medical attention and special treatment needed Pain, eye watering, redness, and/or blistering

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Dry chemical, foam, carbon dioxide, or water fire extinguisher.

5.2 Special Hazards

Ambient fire may liberate hazardous vapors along with nitrogen oxides (NOx).

5.3 Precautions for fire-fighters

Fire fighting media should be selected depending on the surrounding materials and equipment. It is recommended that firefighters wear protective gear and self-contained breathing apparatus to limit their exposure.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear approved safety eyewear and protective gloves.

6.2 Environmental precautions

Avoid putting into drain or sewer systems.

6.3 Methods and materials for containment and clean up

Use inert absorbent material to wipe up and pick-up spilled materials.

6.4 Reference to other safety data sheet (SDS) sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Should only be handled and used by qualified, trained professionals.

Wear protective eyewear, clothing, gloves and other gear whenever handling.

Ensure adequate ventilation.

Avoid all contact with product on skin, eyes, clothing, or surrounding area.

7.2 Condition for safe storage and incompatibilities

Keep tightly closed and store at 2-8°C unless indicated otherwise on the product data sheet.

7.3 Specific end uses

Not Applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters to include specific PPE

Wear protective eyewear, clothing, gloves and other gear whenever handling.

Use chemical resistant gloves. Inspect gloves before use.

8.2 Exposure controls

Ensure all engineering measures listed in section 7 are in place.

Know location of and verify functionality of nearest safety eyewash.

Wash hands and/or arms thoroughly after use.

9.PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Basic physical and chemical properties
 - (a) Physical State: liquid
 - (b) Color: colorless
 - (c) Odor: No data at supplied concentration
 - (d) Melting point / freezing point: No data at supplied concentration
 - (e) Boiling point or initial boiling point and boiling range: No data at supplied concentration
 - (f) Flammability: No data at supplied concentration
 - (g) Lower and upper explosion limit: No data at supplied concentration
 - (h) Flash point: No data at supplied concentration
 - (i) Auto-ignition temperature: No data at supplied concentration
 - (j) Decomposition temperature: No data at supplied concentration
 - (k) pH: No data at supplied concentration
 - (I) Kinematic viscosity: No data at supplied concentration
 - (m) Solubility: No data at supplied concentration
 - (n) Partition coefficient n-octanol/water (log value): No data at supplied concentration
 - (o) Vapor pressure: No data at supplied concentration
 - (p) Density and/or relative density: No data at supplied concentration
 - (q) Relative vapor density: No data at supplied concentration
 - (r) Particle characteristics: No data at supplied concentration
- 9.2.1 Information with Regard to Physical Hazard Classes
 - (a) Explosives: No data at supplied concentration
 - (b) Flammable gases: No data at supplied concentration
 - (c) Aerosols: No data at supplied concentration
 - (d) Oxidizing gases: No data at supplied concentration
 - (e) Gases under pressure: No data at supplied concentration

- (f) Flammable liquids: No data at supplied concentration
- (g) Flammable solids: No data at supplied concentration
- (h) Self-reactive substances and mixtures: No data at supplied concentration
- (i) Pyrophoric liquids: No data at supplied concentration
- (i) Pyrophoric solids: No data at supplied concentration

No data at supplied concentration

- (o) Oxidizing liquids: No data at supplied concentration
- (p) Oxidizing solids: No data at supplied concentration
- (q) Desensitized explosives: No data at supplied concentration

9.2.2 Other safety information

- (a) Mechanical sensitivity: No data at supplied concentration
- (b) Self-accelerating polymerization temperature: No data at supplied concentration
- (c) Formation of explosible dust/air mixtures: No data at supplied concentration
- (d) acid/alkaline reserve: No data at supplied concentration
- (e) Evaporation rate: No data at supplied concentration
- (f) Miscibility: No data at supplied concentration
- (g) Conductivity: No data at supplied concentration
- (h) Corrosiveness: No data at supplied concentration
- (i) gas group: No data at supplied concentration
- (j) redox potential: No data at supplied concentration
- (k) radical formation potential: No data at supplied concentration
- (I) Photocatalytic properties: No data at supplied concentration

10. STABILITY AND REACTIVITY

10.1 Reactivity

None known, No data at supplied concentration

10.2 Chemical stability

Stable if transported and stored per recommendations

10.3 Possibility of hazardous reactions

Stable if transported and stored per recommendations

10.4 Conditions to avoid

Excessive heat or cold. Incompatible products.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

None if transported and stored per recommendations

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity: No data at supplied concentration

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Imidazole	azole 970 mg/kg (rat)		=	

Skin Corrosion/Irritation: No data at supplied concentration

Serious Eye Damage / Irritation: No data at supplied concentration Respiratory or skin sensitization: No data at supplied concentration

Germ Cell Mutagenicity: No data at supplied concentration

Carcinogenicity:

Component	CAS-No	IARC	ARC NTP ACGIH		OSHA	Mexico
Imidazole	ole 288-32-4	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

Reproductive Toxicity: No data at supplied concentration

Specific target organ toxicity – single exposure: No data at supplied concentration Specific target organ toxicity repeated exposure: No data at supplied concentration

Aspiration hazard: No data at supplied concentration

Symptoms / Routes of exposure

Inhalation: No data at supplied concentration Ingestion: No data at supplied concentration Skin: No data at supplied concentration Eyes: No data at supplied concentration

Delayed / Immediate effects: No data at supplied concentration

- 11.2.1 Endocrine disrupting properties: No data at supplied concentration
- 11.2.2 Information on other hazards: No data at supplied concentration

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity: No data at supplied concentration
- 12.2 Persistence and degradability: No data at supplied concentration
- 12.3 Bioaccumulative: No data at supplied concentration
- 12.4 Mobility in soil: No data at supplied concentration
- 12.5 Results of PBT and vPvB assessment: No data at supplied concentration
- 12.6 Adverse effects on environment from endocrine-disrupting properties: No data at supplied concentration
- 12.7 Other adverse effects: No data at supplied concentration

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment methods

Product: Waste must be disposed according to federal, state, and local regulations.

Contaminated packaging: Waste must be disposed according to federal, state, and local regulations.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model regulations as reflected in the IMDG code ADR, RID, DOT and IATA.

14.1 UN-Number

Does not meet the criteria for classification as hazardous for transport.

14.2 UN proper shipping name

Does not meet the criteria for classification as hazardous for transport.

14.3 Transport hazard class

Does not meet the criteria for classification as hazardous for transport.

14.4 Packaging group

Does not meet the criteria for classification as hazardous for transport.

14.5 Environmental hazards

Does not meet the criteria for classification as hazardous for transport.

14.6 Special precautions for users

Does not meet the criteria for classification as hazardous for transport.

14.7 Maritime transport in bulk according to IMO instruments

Does not meet the criteria for classification as hazardous for transport.

Additional transport information:

Does not meet the criteria for classification as hazardous for transport.

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of regulation (EC) No. 453/2010.

15.1 Safety, health and environmental regulations/legislation specific for the substance/mixture

Toxic Substances Control Act (TSCA):

Component	CAS-No	TSCA	TSCA Inventory Notification Active/Inactive	TSCA – EPA Regulatory Flags
Imidazole	288-32-4	Listed	Active	Not Listed

SARA 313: not applicable

SARA 311/312 Hazards: not applicable CERCLA Reportable Quantity: not applicable

California Proposition 65: does not contain any Proposition 65 chemicals

International Inventory

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Imidazole	288-32-4	Х	-	206-019-2	Χ	Х	Х	Х	KE-20937

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been made for this product.

16. OTHER INFORMATION

Document Creation Date: August 26, 2022

Document Revision Date: N/A Description of Change(s): N/A

The above information is believed to be correct but does not purport to be all-inclusive. This document is intended to be used only as a guide. It is incumbent on the user to read and fully understand the document prior to using the product or any of its components. ICL shall not be liable or responsible in any way for use of either this information or the product supplied. Final determination of suitability and safe use of these materials is the sole responsibility of the user. Although a level of information has been made available, it is not a guarantee that no other hazards exist or will not appear during the use of the product and its components.

It is incumbent on the user to know and or determine which local, regional, national and/or global regulations are relevant concerning use and/or transportation of the product and/or its components prior to the use or the shipment of the product and/or components. Although a level of information has been made available, it is not to be assumed that it is all inclusive.

Disposal of waste may be subject to local, regional, national and/or global regulations. It is the responsibility of the user to dispose of the product and its components according to those regulations and laws.

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End of SDS