

SAFETY DATA SHEET



Kappa- Lambda mRNA CISH (Dako Omnis), Part Number G111700-2

Section 1. Identification

Product identifier : Kappa- Lambda mRNA CISH (Dako Omnis), Part Number G111700-2
Part No. (Chemical Kit) : G111700-2
Part No. : Kappa mRNA CISH (Dako Omnis) G111700-85510
 Lambda mRNA CISH (Dako Omnis) G111703-85510

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

For in vitro diagnostic use

Kappa mRNA CISH (Dako Omnis) 2.0 ml
 Lambda mRNA CISH (Dako Omnis) 2.0 ml

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
 679 Springvale Road
 Mulgrave
 Victoria 3170, Australia
 1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

Kappa mRNA CISH (Dako Omnis)

H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

Lambda mRNA CISH (Dako Omnis)

H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

Kappa mRNA CISH (Dako Omnis)	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 10 - 30% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30% Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
Lambda mRNA CISH (Dako Omnis)	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 10 - 30% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30% Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%

GHS label elements

Hazard pictograms

: Kappa mRNA CISH (Dako Omnis)



Lambda mRNA CISH (Dako Omnis)



Section 2. Hazard(s) identification

Signal word	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	WARNING WARNING
Hazard statements	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	H319 - Causes serious eye irritation. H319 - Causes serious eye irritation.
<u>Precautionary statements</u>		
Prevention	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling. P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling.
Response	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
Storage	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not applicable. Not applicable.
Disposal	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not applicable. Not applicable.
Supplemental label elements	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not applicable. Not applicable.
Other hazards which do not result in classification	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	None known. None known.

Section 3. Composition and ingredient information

Substance/mixture	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Mixture Mixture
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CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
Kappa mRNA CISH (Dako Omnis) ethylene carbonate	≥10 - ≤30	96-49-1
Lambda mRNA CISH (Dako Omnis) ethylene carbonate	≥10 - ≤30	96-49-1

Section 3. Composition and ingredient information

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Kappa mRNA CISH (Dako Omnis)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
	: Lambda mRNA CISH (Dako Omnis)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Kappa mRNA CISH (Dako Omnis)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	: Lambda mRNA CISH (Dako Omnis)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Kappa mRNA CISH (Dako Omnis)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	: Lambda mRNA CISH (Dako Omnis)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Kappa mRNA CISH (Dako Omnis)	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

Lambda mRNA CISH (Dako Omnis)	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
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Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: Kappa mRNA CISH (Dako Omnis)	Causes serious eye irritation.
	: Lambda mRNA CISH (Dako Omnis)	Causes serious eye irritation.
Inhalation	: Kappa mRNA CISH (Dako Omnis)	No known significant effects or critical hazards.
	: Lambda mRNA CISH (Dako Omnis)	No known significant effects or critical hazards.
Skin contact	: Kappa mRNA CISH (Dako Omnis)	No known significant effects or critical hazards.
	: Lambda mRNA CISH (Dako Omnis)	No known significant effects or critical hazards.
Ingestion	: Kappa mRNA CISH (Dako Omnis)	No known significant effects or critical hazards.
	: Lambda mRNA CISH (Dako Omnis)	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Kappa mRNA CISH (Dako Omnis)	Adverse symptoms may include the following: pain or irritation watering redness
	: Lambda mRNA CISH (Dako Omnis)	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Kappa mRNA CISH (Dako Omnis)	No specific data.
	: Lambda mRNA CISH (Dako Omnis)	No specific data.
Skin contact	: Kappa mRNA CISH (Dako Omnis)	No specific data.
	: Lambda mRNA CISH (Dako Omnis)	No specific data.
Ingestion	: Kappa mRNA CISH (Dako Omnis)	No specific data.
	: Lambda mRNA CISH (Dako Omnis)	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Section 4. First aid measures

Notes to physician	: Kappa mRNA CISH (Dako Omnis)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	: Lambda mRNA CISH (Dako Omnis)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Kappa mRNA CISH (Dako Omnis)	No specific treatment.
	: Lambda mRNA CISH (Dako Omnis)	No specific treatment.
Protection of first-aiders	: Kappa mRNA CISH (Dako Omnis)	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	: Lambda mRNA CISH (Dako Omnis)	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: Kappa mRNA CISH (Dako Omnis)	Use an extinguishing agent suitable for the surrounding fire.
	: Lambda mRNA CISH (Dako Omnis)	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Kappa mRNA CISH (Dako Omnis)	None known.
	: Lambda mRNA CISH (Dako Omnis)	None known.
Specific hazards arising from the chemical	: Kappa mRNA CISH (Dako Omnis)	In a fire or if heated, a pressure increase will occur and the container may burst.
	: Lambda mRNA CISH (Dako Omnis)	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Kappa mRNA CISH (Dako Omnis)	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides
	: Lambda mRNA CISH (Dako Omnis)	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: Kappa mRNA CISH (Dako Omnis)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	: Lambda mRNA CISH (Dako Omnis)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Special protective equipment for fire-fighters	: Kappa mRNA CISH (Dako Omnis)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Lambda mRNA CISH (Dako Omnis)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Kappa mRNA CISH (Dako Omnis)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Lambda mRNA CISH (Dako Omnis)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: Kappa mRNA CISH (Dako Omnis)	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Lambda mRNA CISH (Dako Omnis)	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Kappa mRNA CISH (Dako Omnis)	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Lambda mRNA CISH (Dako Omnis)	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up	: Kappa mRNA CISH (Dako Omnis)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Lambda mRNA CISH (Dako Omnis)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Kappa mRNA CISH (Dako Omnis)	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	: Lambda mRNA CISH (Dako Omnis)	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Kappa mRNA CISH (Dako Omnis)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	: Lambda mRNA CISH (Dako Omnis)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Kappa mRNA CISH (Dako Omnis)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	: Lambda mRNA CISH (Dako Omnis)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Kappa mRNA CISH (Dako Omnis) Liquid.
Lambda mRNA CISH (Dako Omnis) Liquid.
- Colour** : Kappa mRNA CISH (Dako Omnis) Not available.
Lambda mRNA CISH (Dako Omnis) Not available.
- Odour** : Kappa mRNA CISH (Dako Omnis) Not available.
Lambda mRNA CISH (Dako Omnis) Not available.

Section 9. Physical and chemical properties

Odour threshold	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
pH	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	6.2 6.2
Melting point	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Boiling point	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Flash point	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Evaporation rate	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Flammability (solid, gas)	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not applicable. Not applicable.
Lower and upper explosive (flammable) limits	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Vapour pressure	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Vapour density	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Relative density	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Solubility	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.
Auto-ignition temperature	: Kappa mRNA CISH (Dako Omnis) Lambda mRNA CISH (Dako Omnis)	Not available. Not available.

Section 9. Physical and chemical properties

Decomposition temperature	: Kappa mRNA CISH (Dako Omnis)	Not available.
	: Lambda mRNA CISH (Dako Omnis)	Not available.
Viscosity	: Kappa mRNA CISH (Dako Omnis)	Not available.
	: Lambda mRNA CISH (Dako Omnis)	Not available.

Section 10. Stability and reactivity

Reactivity	: Kappa mRNA CISH (Dako Omnis)	No specific test data related to reactivity available for this product or its ingredients.
	: Lambda mRNA CISH (Dako Omnis)	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Kappa mRNA CISH (Dako Omnis)	The product is stable.
	: Lambda mRNA CISH (Dako Omnis)	The product is stable.
Possibility of hazardous reactions	: Kappa mRNA CISH (Dako Omnis)	Under normal conditions of storage and use, hazardous reactions will not occur.
	: Lambda mRNA CISH (Dako Omnis)	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Kappa mRNA CISH (Dako Omnis)	No specific data.
	: Lambda mRNA CISH (Dako Omnis)	No specific data.
Incompatible materials	: Kappa mRNA CISH (Dako Omnis)	May react or be incompatible with oxidising materials.
	: Lambda mRNA CISH (Dako Omnis)	May react or be incompatible with oxidising materials.
Hazardous decomposition products	: Kappa mRNA CISH (Dako Omnis)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	: Lambda mRNA CISH (Dako Omnis)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Kappa mRNA CISH (Dako Omnis) ethylene carbonate	LD50 Oral	Rat	10 g/kg	-
Lambda mRNA CISH (Dako Omnis) ethylene carbonate	LD50 Oral	Rat	10 g/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Kappa mRNA CISH (Dako Omnis) ethylene carbonate	Skin - Mild irritant	Rabbit	-	660 milligrams	-
Lambda mRNA CISH (Dako Omnis) ethylene carbonate	Skin - Mild irritant	Rabbit	-	660 milligrams	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Kappa mRNA CISH (Dako Omnis) Routes of entry anticipated: Oral, Dermal, Inhalation.
 Lambda mRNA CISH (Dako Omnis) Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Kappa mRNA CISH (Dako Omnis) Causes serious eye irritation.
 Lambda mRNA CISH (Dako Omnis) Causes serious eye irritation.

Inhalation : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
 Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Skin contact : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
 Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Ingestion : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
 Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

Eye contact	: Kappa mRNA CISH (Dako Omnis)	Adverse symptoms may include the following: pain or irritation watering redness
	: Lambda mRNA CISH (Dako Omnis)	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Kappa mRNA CISH (Dako Omnis)	No specific data.
	: Lambda mRNA CISH (Dako Omnis)	No specific data.
Skin contact	: Kappa mRNA CISH (Dako Omnis)	No specific data.
	: Lambda mRNA CISH (Dako Omnis)	No specific data.
Ingestion	: Kappa mRNA CISH (Dako Omnis)	No specific data.
	: Lambda mRNA CISH (Dako Omnis)	No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Carcinogenicity : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Mutagenicity : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Teratogenicity : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Developmental effects : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Fertility effects : Kappa mRNA CISH (Dako Omnis) No known significant effects or critical hazards.
Lambda mRNA CISH (Dako Omnis) No known significant effects or critical hazards.

Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Kappa mRNA CISH (Dako Omnis) ethylene carbonate	Acute LC50 53000 mg/l Fresh water	Fish - Fry	96 hours
Lambda mRNA CISH (Dako Omnis) ethylene carbonate	Acute LC50 53000 mg/l Fresh water	Fish - Fry	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Kappa mRNA CISH (Dako Omnis) ethylene carbonate	0.11	-	low
Lambda mRNA CISH (Dako Omnis) ethylene carbonate	0.11	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

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Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: Not determined.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): All components are listed or exempted.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: All components are listed or exempted.
Viet Nam	: Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 10/09/2017
Date of previous issue : 31/05/2017.
Version : 1.1

Key to abbreviations

: ADG = Australian Dangerous Goods
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 NOHSC = National Occupational Health and Safety Commission
 SUSMP = Standard Uniform Schedule of Medicine and Poisons
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
Kappa mRNA CISH (Dako Omnis) Eye Irrit. 2A, H319	Calculation method
Lambda mRNA CISH (Dako Omnis) Eye Irrit. 2A, H319	Calculation method

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

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