

SAFETY DATA SHEET



Genomic DNA ULS Labeling Kit, Part Number 5190-0419

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Genomic DNA ULS Labeling Kit, Part Number 5190-0419
Part no. (chemical kit) : 5190-0419
Part no. : Agilent-CGHblock 5190-0421
 ULS-Cyanine3 LK019G
 ULS-Cyanine5 LK020G
 10X Labeling Solution LK017D

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

Identified uses : Analytical reagent.
 The following article is also contained in this kit: SP0005K. (No SDS is necessary.)
 Agilent-CGHblock 0.75 ml
 ULS-Cyanine3 0.0125 ml
 ULS-Cyanine5 0.0125 ml
 10X Labeling Solution 0.1 ml

Uses advised against : None known.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Deutschland GmbH
 Hewlett-Packard-Str. 8
 76337 Waldbronn
 Germany
 0800 603 1000
e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Agilent-CGHblock Mixture
 ULS-Cyanine3 Mixture
 ULS-Cyanine5 Mixture
 10X Labeling Solution Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Agilent-CGHblock

H315 SKIN CORROSION/IRRITATION Category 2
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION Category 2

ULS-Cyanine3

H319 SERIOUS EYE DAMAGE/EYE IRRITATION Category 2
 H360D REPRODUCTIVE TOXICITY Category 1B

ULS-Cyanine5

H319 SERIOUS EYE DAMAGE/EYE IRRITATION Category 2
 H360D REPRODUCTIVE TOXICITY Category 1B






SECTION 2: Hazards identification

Agilent-CGHblock	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
ULS-Cyanine3	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
ULS-Cyanine5	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
10X Labeling Solution	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity	: Agilent-CGHblock	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
		Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	ULS-Cyanine3	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
		Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	ULS-Cyanine5	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1 - 10%
		Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
		Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
		Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1 - 10%
	10X Labeling Solution	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
Ingredients of unknown ecotoxicity	: Agilent-CGHblock	Contains 2.5% of components with unknown hazards to the aquatic environment
	ULS-Cyanine3	Contains 5% of components with unknown hazards to the aquatic environment
	ULS-Cyanine5	Contains 5% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.
 See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms	: Agilent-CGHblock	
	ULS-Cyanine3	 
	ULS-Cyanine5	 

Signal word	: Agilent-CGHblock	Warning
	ULS-Cyanine3	Danger
	ULS-Cyanine5	Danger
	10X Labeling Solution	No signal word.

SECTION 2: Hazards identification

Hazard statements	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	H315 - Causes skin irritation. H319 - Causes serious eye irritation. H319 - Causes serious eye irritation. H360D - May damage the unborn child. H319 - Causes serious eye irritation. H360D - May damage the unborn child. No known significant effects or critical hazards.
Precautionary statements		
Prevention	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	P280 - Wear protective gloves. Wear eye or face protection. P264 - Wash thoroughly after handling. P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. Not applicable.
Response	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. 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 advice or attention. P308 + P313 - IF exposed or concerned: Get medical advice or 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 advice or attention. P308 + P313 - IF exposed or concerned: Get medical advice or 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 advice or attention. Not applicable.
Storage	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	Not applicable. Not applicable. Not applicable. Not applicable.
Disposal	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable.
Hazardous ingredients	: ULS-Cyanine3 ULS-Cyanine5	N, N-dimethylformamide N, N-dimethylformamide
Supplemental label elements	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	Not applicable. Not applicable. Not applicable. Safety data sheet available on request.

SECTION 2: Hazards identification

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Agilent-CGHblock Not applicable.
 ULS-Cyanine3 Restricted to professional users.
 ULS-Cyanine5 Restricted to professional users.
 10X Labeling Solution Not applicable.

Special packaging requirements

Tactile warning of danger : Agilent-CGHblock Not applicable.
 ULS-Cyanine3 Not applicable.
 ULS-Cyanine5 Not applicable.
 10X Labeling Solution Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : Agilent-CGHblock This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 ULS-Cyanine3 This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 ULS-Cyanine5 This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 10X Labeling Solution This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : Agilent-CGHblock None known.
 ULS-Cyanine3 None known.
 ULS-Cyanine5 None known.
 10X Labeling Solution None known.

SECTION 3: Composition/information on ingredients

3.1 Substances : Agilent-CGHblock Mixture
 ULS-Cyanine3 Mixture
 ULS-Cyanine5 Mixture
 10X Labeling Solution Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Agilent-CGHblock sodium diethyldithiocarbamate	EC: 205-710-6 CAS: 148-18-5	<3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400	ATE [Oral] = 1500 mg/kg M [Acute] = 1	[1]
ULS-Cyanine3 N, N-dimethylformamide	EC: 200-679-5 CAS: 68-12-2 Index: 616-001-00-X	≥50 - <55	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319 Repr. 1B, H360D	ATE [Dermal] = 1500 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
ULS-Cyanine5 N, N-dimethylformamide	EC: 200-679-5 CAS: 68-12-2 Index: 616-001-00-X	≥50 - <55	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319 Repr. 1B, H360D	ATE [Dermal] = 1500 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
10X Labeling Solution					

SECTION 3: Composition/information on ingredients

trometamol	EC: 201-064-4 CAS: 77-86-1	<10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 See Section 16 for the full text of the H statements declared above.	-	[1]
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There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type	
Agilent-CGHblock	[1] Substance classified with a health or environmental hazard
ULS-Cyanine3	[1] Substance classified with a health or environmental hazard
	[2] Substance with a workplace exposure limit
ULS-Cyanine5	[1] Substance classified with a health or environmental hazard
	[2] Substance with a workplace exposure limit
10X Labeling Solution	[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: Agilent-CGHblock	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.
	ULS-Cyanine3	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.
	ULS-Cyanine5	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.
	10X Labeling Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Agilent-CGHblock	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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	ULS-Cyanine3	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 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	ULS-Cyanine5	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is

SECTION 4: First aid measures

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 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

10X Labeling Solution

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Agilent-CGHblock

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

ULS-Cyanine3

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

ULS-Cyanine5

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

10X Labeling Solution

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion

: Agilent-CGHblock

Wash out mouth with water. Remove dentures if any. 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.

ULS-Cyanine3

Wash out mouth with water. Remove dentures if any. 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. 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.

ULS-Cyanine5

Wash out mouth with water. Remove dentures if any. 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

SECTION 4: First aid measures

	10X Labeling Solution	personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	: Agilent-CGHblock	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.
	ULS-Cyanine3	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	ULS-Cyanine5	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	10X Labeling Solution	No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	: Agilent-CGHblock	Causes serious eye irritation.
	ULS-Cyanine3	Causes serious eye irritation.
	ULS-Cyanine5	Causes serious eye irritation.
	10X Labeling Solution	No known significant effects or critical hazards.
Inhalation	: Agilent-CGHblock	No known significant effects or critical hazards.
	ULS-Cyanine3	No known significant effects or critical hazards.
	ULS-Cyanine5	No known significant effects or critical hazards.
	10X Labeling Solution	No known significant effects or critical hazards.
Skin contact	: Agilent-CGHblock	Causes skin irritation.
	ULS-Cyanine3	No known significant effects or critical hazards.
	ULS-Cyanine5	No known significant effects or critical hazards.
	10X Labeling Solution	No known significant effects or critical hazards.
Ingestion	: Agilent-CGHblock	No known significant effects or critical hazards.
	ULS-Cyanine3	No known significant effects or critical hazards.
	ULS-Cyanine5	No known significant effects or critical hazards.
	10X Labeling Solution	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Agilent-CGHblock	Adverse symptoms may include the following: pain or irritation watering redness
	ULS-Cyanine3	Adverse symptoms may include the following: pain or irritation watering redness
	ULS-Cyanine5	Adverse symptoms may include the following: pain or irritation watering

SECTION 4: First aid measures

Inhalation	10X Labeling Solution	redness No specific data.
	: Agilent-CGHblock ULS-Cyanine3	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	ULS-Cyanine5	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	10X Labeling Solution	No specific data.
	: Agilent-CGHblock	Adverse symptoms may include the following: irritation redness
	ULS-Cyanine3	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	ULS-Cyanine5	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	10X Labeling Solution	No specific data.
	: Agilent-CGHblock ULS-Cyanine3	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	ULS-Cyanine5	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	10X Labeling Solution	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Agilent-CGHblock	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	ULS-Cyanine3	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	ULS-Cyanine5	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	10X Labeling Solution	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: Agilent-CGHblock	No specific treatment.
	ULS-Cyanine3	No specific treatment.
	ULS-Cyanine5	No specific treatment.
	10X Labeling Solution	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Agilent-CGHblock	Use an extinguishing agent suitable for the surrounding fire.
	ULS-Cyanine3	Use an extinguishing agent suitable for the surrounding fire.
	ULS-Cyanine5	Use an extinguishing agent suitable for the surrounding fire.
	10X Labeling Solution	Use an extinguishing agent suitable for the surrounding fire.

SECTION 5: Firefighting measures

Unsuitable extinguishing media	: Agilent-CGHblock	None known.
	ULS-Cyanine3	None known.
	ULS-Cyanine5	None known.
	10X Labeling Solution	None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: Agilent-CGHblock	In a fire or if heated, a pressure increase will occur and the container may burst.
	ULS-Cyanine3	In a fire or if heated, a pressure increase will occur and the container may burst.
	ULS-Cyanine5	In a fire or if heated, a pressure increase will occur and the container may burst.
	10X Labeling Solution	In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products	: Agilent-CGHblock	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides halogenated compounds metal oxide/oxides
	ULS-Cyanine3	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	ULS-Cyanine5	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	10X Labeling Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

5.3 Advice for firefighters

Special precautions for fire-fighters	: Agilent-CGHblock	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.
	ULS-Cyanine3	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.
	ULS-Cyanine5	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.
	10X Labeling Solution	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.
Special protective equipment for fire-fighters	: Agilent-CGHblock	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	ULS-Cyanine3	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves)

SECTION 5: Firefighting measures

ULS-Cyanine5	conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
10X Labeling Solution	conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Agilent-CGHblock	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.
	ULS-Cyanine3	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.
	ULS-Cyanine5	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.
	10X Labeling Solution	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. Put on appropriate personal protective equipment.
For emergency responders	: Agilent-CGHblock	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".
	ULS-Cyanine3	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".
	ULS-Cyanine5	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".
	10X Labeling Solution	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".

SECTION 6: Accidental release measures

6.2 Environmental precautions	: Agilent-CGHblock	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).
	ULS-Cyanine3	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).
	ULS-Cyanine5	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).
	10X Labeling Solution	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).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: Agilent-CGHblock	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.
	ULS-Cyanine3	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.
	ULS-Cyanine5	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.
	10X Labeling Solution	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.

6.4 Reference to other sections : See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: Agilent-CGHblock	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.
	ULS-Cyanine3	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

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Advice on general occupational hygiene

<p>ULS-Cyanine5</p>	<p>Empty containers retain product residue and can be hazardous. Do not reuse container.</p> <p>Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.</p>
<p>10X Labeling Solution</p>	<p>Empty containers retain product residue and can be hazardous. Do not reuse container.</p> <p>Put on appropriate personal protective equipment (see Section 8).</p>
<p>: Agilent-CGHblock</p>	<p>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.</p>
<p>ULS-Cyanine3</p>	<p>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.</p>
<p>ULS-Cyanine5</p>	<p>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.</p>
<p>10X Labeling Solution</p>	<p>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.</p>

7.2 Conditions for safe storage, including any incompatibilities

Storage

<p>: Agilent-CGHblock</p>	<p>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.</p>
<p>ULS-Cyanine3</p>	<p>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. Store locked up. 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.</p>
<p>ULS-Cyanine5</p>	<p>Store in accordance with local regulations. Store in original</p>

SECTION 7: Handling and storage

10X Labeling Solution

container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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.

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.

7.3 Specific end use(s)

Recommendations	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	Not available. Not available. Not available. Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
ULS-Cyanine3 N, N-dimethylformamide	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 5 ppm 8 hours. OELV: 15 mg/m ³ 8 hours. OELV: 10 ppm 15 minutes. OELV: 30 mg/m ³ 15 minutes.
ULS-Cyanine5 N, N-dimethylformamide	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 5 ppm 8 hours. OELV: 15 mg/m ³ 8 hours. OELV: 10 ppm 15 minutes. OELV: 30 mg/m ³ 15 minutes.

Biological exposure indices

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure indices
ULS-Cyanine3 N, N-dimethylformamide	NAOSH (Ireland, 1/2011) BMGV: 15 mg/l, N-methylformamide [in urine]. Sampling time: post shift.
ULS-Cyanine5 N, N-dimethylformamide	NAOSH (Ireland, 1/2011) BMGV: 15 mg/l, N-methylformamide [in urine]. Sampling time: post shift.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
ULS-Cyanine3 N, N-dimethylformamide	DNEL	Long term Inhalation	6 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	1.1 mg/kg bw/day	Workers	Systemic
ULS-Cyanine5 N, N-dimethylformamide	DNEL	Long term Inhalation	6 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	1.1 mg/kg bw/day	Workers	Systemic
10X Labeling Solution Trometamol	DNEL	Long term Oral	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	29 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	83.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	117.5 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	166.7 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

SECTION 8: Exposure controls/personal protection

- 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.
- 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.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Agilent-CGHblock	Liquid.
	ULS-Cyanine3	Liquid. [Clear.]
	ULS-Cyanine5	Liquid.
	10X Labeling Solution	Liquid.
Colour	: Agilent-CGHblock	Not available.
	ULS-Cyanine3	Pink [Light]
	ULS-Cyanine5	Blue. [Light]
	10X Labeling Solution	Colourless.
Odour	: Agilent-CGHblock	Not available.
	ULS-Cyanine3	Amine-like. [Slight]
	ULS-Cyanine5	Amine-like. [Slight]
	10X Labeling Solution	Odourless.
Odour threshold	: Agilent-CGHblock	Not available.
	ULS-Cyanine3	Not available.
	ULS-Cyanine5	Not available.
	10X Labeling Solution	Not available.
Melting point/freezing point	: Agilent-CGHblock	Not available.
	ULS-Cyanine3	Not available.
	ULS-Cyanine5	Not available.
	10X Labeling Solution	Not available.

SECTION 9: Physical and chemical properties

Initial boiling point and boiling range : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution 95 to 100°C

Flammability : Agilent-CGHblock Not applicable.
 ULS-Cyanine3 Not applicable.
 ULS-Cyanine5 Not applicable.
 10X Labeling Solution Not applicable.

Upper/lower flammability or explosive limits : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

Flash point :

Ingredient name	Closed cup		Open cup	
	°C	Method	°C	Method
ULS-Cyanine3 N, N-dimethylformamide	57.5	DIN 51755	-	-
ULS-Cyanine5 N, N-dimethylformamide	57.5	DIN 51755	-	-

Auto-ignition temperature :

Ingredient name	°C	Method
ULS-Cyanine3 N, N-dimethylformamide	445	-
ULS-Cyanine5 N, N-dimethylformamide	445	-

Decomposition temperature : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

pH : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution 7 to 8

Viscosity : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

Solubility(ies) :

Media	Result
Agilent-CGHblock water	Soluble
ULS-Cyanine3 water	Not soluble
ULS-Cyanine5 water	Not soluble
10X Labeling Solution water	Soluble

Partition coefficient: n-octanol/water : Agilent-CGHblock Not applicable.
 ULS-Cyanine3 Not applicable.
 ULS-Cyanine5 Not applicable.
 10X Labeling Solution Not applicable.

Vapour pressure :

SECTION 9: Physical and chemical properties

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Agilent-CGHblock						
water	17.5	2.3	-	92.258	12.3	-
ULS-Cyanine3						
water	17.5	2.3	-	92.258	12.3	-
N, N-dimethylformamide	3.7	0.49	-	-	-	-
ULS-Cyanine5						
water	17.5	2.3	-	92.258	12.3	-
N, N-dimethylformamide	3.7	0.49	-	-	-	-
10X Labeling Solution						
water	17.5	2.3	-	92.258	12.3	-
trometamol	<0.00075006	<0.0001	-	-	-	-

Evaporation rate : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

Relative density : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

Vapour density : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

Explosive properties : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

Oxidising properties : Agilent-CGHblock Not available.
 ULS-Cyanine3 Not available.
 ULS-Cyanine5 Not available.
 10X Labeling Solution Not available.

Particle characteristics

Median particle size : Agilent-CGHblock Not applicable.
 ULS-Cyanine3 Not applicable.
 ULS-Cyanine5 Not applicable.
 10X Labeling Solution Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	The product is stable. The product is stable. The product is stable. The product is stable.
10.3 Possibility of hazardous reactions	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	No specific data. No specific data. No specific data. No specific data.
10.5 Incompatible materials	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
10.6 Hazardous decomposition products	: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5 10X Labeling Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Agilent-CGHblock sodium diethyldithiocarbamate	LD50 Oral	Rat	1500 mg/kg	-
ULS-Cyanine3 N, N-dimethylformamide	LC50 Inhalation Vapour	Rat	3421 ppm	1 hours
	LC50 Inhalation Vapour	Rat	1948 ppm	4 hours
	LD50 Oral	Rat	4000 mg/kg	-
ULS-Cyanine5 N, N-dimethylformamide	LC50 Inhalation Vapour	Rat	3421 ppm	1 hours
	LC50 Inhalation Vapour	Rat	1948 ppm	4 hours
	LD50 Oral	Rat	4000 mg/kg	-

SECTION 11: Toxicological information

10X Labeling Solution Trometamol	LD50 Dermal	Rat	>5000 mg/kg	-
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Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Agilent-CGHblock Agilent-CGHblock sodium diethyldithiocarbamate	150000.0 1500	N/A N/A	N/A N/A	N/A N/A	N/A N/A
ULS-Cyanine3 ULS-Cyanine3 N, N-dimethylformamide	N/A 4000	2754.8 1500	N/A N/A	20.2 11	N/A N/A
ULS-Cyanine5 ULS-Cyanine5 N, N-dimethylformamide	N/A 4000	2754.8 1500	N/A N/A	20.2 11	N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ULS-Cyanine3 N, N-dimethylformamide	Eyes - Severe irritant	Rabbit	-	100 %	-
ULS-Cyanine5 N, N-dimethylformamide	Eyes - Severe irritant	Rabbit	-	100 %	-
10X Labeling Solution Trometamol	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : 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

: Agilent-CGHblock
ULS-Cyanine3
ULS-Cyanine5
10X Labeling Solution

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

SECTION 11: Toxicological information

Inhalation	: Agilent-CGHblock	No known significant effects or critical hazards.
	ULS-Cyanine3	No known significant effects or critical hazards.
	ULS-Cyanine5	No known significant effects or critical hazards.
	10X Labeling Solution	No known significant effects or critical hazards.
Ingestion	: Agilent-CGHblock	No known significant effects or critical hazards.
	ULS-Cyanine3	No known significant effects or critical hazards.
	ULS-Cyanine5	No known significant effects or critical hazards.
	10X Labeling Solution	No known significant effects or critical hazards.
Skin contact	: Agilent-CGHblock	Causes skin irritation.
	ULS-Cyanine3	No known significant effects or critical hazards.
	ULS-Cyanine5	No known significant effects or critical hazards.
	10X Labeling Solution	No known significant effects or critical hazards.
Eye contact	: Agilent-CGHblock	Causes serious eye irritation.
	ULS-Cyanine3	Causes serious eye irritation.
	ULS-Cyanine5	Causes serious eye irritation.
	10X Labeling Solution	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: Agilent-CGHblock	No specific data.
	ULS-Cyanine3	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	ULS-Cyanine5	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	10X Labeling Solution	No specific data.
Ingestion	: Agilent-CGHblock	No specific data.
	ULS-Cyanine3	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	ULS-Cyanine5	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	10X Labeling Solution	No specific data.
Skin contact	: Agilent-CGHblock	Adverse symptoms may include the following: irritation redness
	ULS-Cyanine3	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	ULS-Cyanine5	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	10X Labeling Solution	No specific data.
Eye contact	: Agilent-CGHblock	Adverse symptoms may include the following: pain or irritation watering redness
	ULS-Cyanine3	Adverse symptoms may include the following: pain or irritation watering redness
	ULS-Cyanine5	Adverse symptoms may include the following: pain or irritation watering redness

SECTION 11: Toxicological information

10X Labeling Solution 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

Conclusion/Summary : Not available.

General : Agilent-CGHblock No known significant effects or critical hazards.
 ULS-Cyanine3 No known significant effects or critical hazards.
 ULS-Cyanine5 No known significant effects or critical hazards.
 10X Labeling Solution No known significant effects or critical hazards.

Carcinogenicity : Agilent-CGHblock No known significant effects or critical hazards.
 ULS-Cyanine3 No known significant effects or critical hazards.
 ULS-Cyanine5 No known significant effects or critical hazards.
 10X Labeling Solution No known significant effects or critical hazards.

Mutagenicity : Agilent-CGHblock No known significant effects or critical hazards.
 ULS-Cyanine3 No known significant effects or critical hazards.
 ULS-Cyanine5 No known significant effects or critical hazards.
 10X Labeling Solution No known significant effects or critical hazards.

Reproductive toxicity : Agilent-CGHblock No known significant effects or critical hazards.
 ULS-Cyanine3 May damage the unborn child.
 ULS-Cyanine5 May damage the unborn child.
 10X Labeling Solution No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Agilent-CGHblock sodium diethyldithiocarbamate	Acute EC50 1400 µg/l Fresh water	Algae - <i>Chlorella pyrenoidosa</i>	96 hours
	Acute LC50 910 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 6900 µg/l Fresh water	Fish - <i>Poecilia reticulata</i>	96 hours
ULS-Cyanine3 N, N-dimethylformamide	Acute EC50 4500 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 >100000 µg/l Marine water	Crustaceans - <i>Crangon crangon</i> - Adult	48 hours
	Acute LC50 7100000 µg/l Fresh water	Fish - <i>Lepomis macrochirus</i> - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 1500 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Fish - <i>Oncorhynchus mykiss</i> - Embryo	30 days

SECTION 12: Ecological information

ULS-Cyanine5 N, N-dimethylformamide	Acute EC50 4500 mg/l Fresh water Acute LC50 >100000 µg/l Marine water	Daphnia - <i>Daphnia magna</i> Crustaceans - <i>Crangon crangon</i> - Adult	48 hours 48 hours
	Acute LC50 7100000 µg/l Fresh water	Fish - <i>Lepomis macrochirus</i> - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
10X Labeling Solution Trometamol	Chronic NOEC 1500 mg/l Fresh water Chronic NOEC 0.1 ml/L Fresh water	Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i> - Embryo	21 days 30 days
	Acute EC50 >980 mg/l Fresh water Acute NOEC 520 mg/l Fresh water	Daphnia Daphnia	48 hours 48 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ULS-Cyanine3 N, N-dimethylformamide	-	100 % - Readily - 21 days	-	-
ULS-Cyanine5 N, N-dimethylformamide	-	100 % - Readily - 21 days	-	-
10X Labeling Solution Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Agilent-CGHblock sodium diethyldithiocarbamate	-	-	Readily
ULS-Cyanine3 N, N-dimethylformamide	-	-	Readily
ULS-Cyanine5 N, N-dimethylformamide	-	-	Readily
10X Labeling Solution 10X Labeling Solution Trometamol	- -	- -	Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Agilent-CGHblock sodium diethyldithiocarbamate	-1.1	-	Low
ULS-Cyanine3 N, N-dimethylformamide	-1.01	0.79	Low
ULS-Cyanine5 N, N-dimethylformamide	-1.01	0.79	Low

SECTION 12: Ecological information

10X Labeling Solution Trometamol	-2.31	-	Low
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12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : 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.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

SECTION 14: Transport information

Additional information

14.6 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.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
ULS-Cyanine3 N,N-Dimethylformamide	Toxic to reproduction	Recommended	ED/169/2012	2/6/2014
ULS-Cyanine5 N,N-Dimethylformamide	Toxic to reproduction	Recommended	ED/169/2012	2/6/2014

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product / Ingredient name	Identifiers	Designation [Usage]
Agilent-CGHblock Agilent-CGHblock		3
ULS-Cyanine3 ULS-Cyanine3		3 30 30 76
N, N-dimethylformamide		
ULS-Cyanine5 ULS-Cyanine5		3 30 30 76
N, N-dimethylformamide		

Label : Agilent-CGHblock : Not applicable.
 ULS-Cyanine3 : Restricted to professional users.
 ULS-Cyanine5 : Restricted to professional users.
 10X Labeling Solution : Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

SECTION 15: Regulatory information

This product is not controlled under the Seveso Directive.

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
ULS-Cyanine3 N, N-dimethylformamide	Ireland Occupational Exposure Limits	dimethylformamide	Repro. Repr.1B	-
ULS-Cyanine5 N, N-dimethylformamide	Ireland Occupational Exposure Limits	dimethylformamide	Repro. Repr.1B	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

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	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory : Not determined.
Japan	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic

SECTION 16: Other information

PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

[Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

Classification	Justification
Agilent-CGHblock Skin Irrit. 2, H315 Eye Irrit. 2, H319	Calculation method Calculation method
ULS-Cyanine3 Eye Irrit. 2, H319 Repr. 1B, H360D	Calculation method Calculation method
ULS-Cyanine5 Eye Irrit. 2, H319 Repr. 1B, H360D	Calculation method Calculation method

[Full text of abbreviated H statements](#)

Agilent-CGHblock H302 H314 H315 H318 H319 H400	Harmful if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye damage. Causes serious eye irritation. Very toxic to aquatic life.
ULS-Cyanine3 H226 H312 H319 H332 H360D	Flammable liquid and vapour. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled. May damage the unborn child.
ULS-Cyanine5 H226 H312 H319 H332 H360D	Flammable liquid and vapour. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled. May damage the unborn child.
10X Labeling Solution H315 H319	Causes skin irritation. Causes serious eye irritation.

[Full text of classifications \[CLP/GHS\]](#)

Agilent-CGHblock Acute Tox. 4 Aquatic Acute 1 Eye Dam. 1 Eye Irrit. 2 Skin Corr. 1B Skin Irrit. 2	ACUTE TOXICITY - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2
ULS-Cyanine3 Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 3 Repr. 1B	ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 3 REPRODUCTIVE TOXICITY - Category 1B
ULS-Cyanine5 Acute Tox. 4 Eye Irrit. 2	ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

SECTION 16: Other information

Flam. Liq. 3 Repr. 1B	FLAMMABLE LIQUIDS - Category 3 REPRODUCTIVE TOXICITY - Category 1B
10X Labeling Solution Eye Irrit. 2 Skin Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2

Date of issue/ Date of revision : 20/03/2024

Date of previous issue : No previous validation

Version : 1

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