## **SAFETY DATA SHEET**



Genomic DNA ULS Labeling Kit, Part Number 5190-0419

## **Section 1. Identification**

Product identifier : 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

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-CGHblock0.75 mlULS-Cyanine30.0125 mlULS-Cyanine50.0125 ml10X Labeling Solution0.1 ml

**Supplier/Manufacturer**: Agilent Technologies, Inc.

5301 Stevens Creek Blvd Santa Clara, CA 95051, USA

800-227-9770

Emergency telephone number (with hours of

operation)

: CHEMTREC®: 1-800-424-9300

## Section 2. Hazard identification

#### Classification of the substance or mixture

#### Agilent-CGHblock

H315 SKIN IRRITATION - Category 2 H319 EYE IRRITATION - Category 2A

**ULS-Cyanine3** 

H319 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1

H360 TOXIC TO REPRODUCTION - Category 1

**ULS-Cyanine5** 

H319 EYE IRRITATION - Category 2A H350 CARCINOGENICITY - Category 1

H360 TOXIC TO REPRODUCTION - Category 1

**GHS label elements** 

### Section 2. Hazard identification

**Hazard pictograms** 

: Agilent-CGHblock

**ULS-Cyanine3** 

**ULS-Cyanine5** 



No signal word.

Warning

Danger

Danger



Signal word

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

**Hazard statements** 

: Agilent-CGHblock

**ULS-Cyanine3** 

**ULS-Cyanine5** 

H315 - Causes skin irritation.

H319 - Causes serious eye irritation. H319 - Causes serious eye irritation.

H360 - May damage fertility or the unborn child.

H319 - Causes serious eye irritation.

H350 - May cause cancer.

H350 - May cause cancer.

H360 - May damage fertility or the unborn child. 10X Labeling Solution

No known significant effects or critical hazards.

**Precautionary statements** 

**Prevention** 

: Agilent-CGHblock

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 eve or face protection.

**ULS-Cyanine5** 

**ULS-Cyanine3** 

P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing

and eye or face protection.

10X Labeling Solution

Response

: Agilent-CGHblock

P362 + P364 - Take off contaminated clothing and

wash it before reuse.

Not applicable.

P302 + P352 - IF ON SKIN: Wash with plenty of

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.

**ULS-Cyanine3** 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.

**ULS-Cyanine5** 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

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#### Section 2. Hazard identification

lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical

advice or attention.

10X Labeling Solution Not applicable. Agilent-CGHblock Not applicable. **Storage** 

10X Labeling Solution

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

P501 - Dispose of contents and container in ULS-Cyanine3

accordance with all local, regional, national and

international regulations.

**ULS-Cyanine5** P501 - Dispose of contents and container in

Not applicable.

accordance with all local, regional, national and

international regulations.

Supplemental label elements

**Disposal** 

: Agilent-CGHblock None known. **ULS-Cyanine3** None known. **ULS-Cyanine5** None known. 10X Labeling Solution None known.

Agilent-CGHblock Percentage of the mixture consisting of ingredient(s)

of unknown hazards to the aquatic environment: 2.5% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5%

Other hazards which do not : Agilent-CGHblock result in classification

None known. **ULS-Cyanine3 ULS-Cyanine5** 10X Labeling Solution

None known. None known. None known.

## Section 3. Composition/information on ingredients

**ULS-Cyanine3** 

**ULS-Cyanine5** 

Substance/mixture : Agilent-CGHblock Mixture Mixture

**ULS-Cyanine3 ULS-Cyanine5** Mixture 10X Labeling Solution Mixture

| Ingredient name               | Synonyms                      | % (w/w)   | CAS number |
|-------------------------------|-------------------------------|-----------|------------|
| Agilent-CGHblock              |                               |           |            |
| sodium diethyldithiocarbamate | sodium diethyldithiocarbamate | ≥1 - ≤5   | 148-18-5   |
| ULS-Cyanine3                  |                               |           |            |
| N,N-Dimethylformamide         | N,N-Dimethylformamide         | ≥30 - ≤60 | 68-12-2    |
| ULS-Cyanine5                  |                               |           |            |
| N,N-Dimethylformamide         | N,N-Dimethylformamide         | ≥30 - ≤60 | 68-12-2    |
| 10X Labeling Solution         |                               |           |            |
| Trometamol                    | Tris                          | ≥5 - ≤10  | 77-86-1    |

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

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## Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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** : Agilent-CGHblock

**ULS-Cyanine3** 

**ULS-Cyanine5** 

10X Labeling Solution

Inhalation : Agilent-CGHblock

**ULS-Cyanine3** 

**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. 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. 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. 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.

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.

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.

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.

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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.

Flush contaminated skin with plenty of water. **Skin contact** : Agilent-CGHblock

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.

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 anv.

> 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.

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

**ULS-Cyanine3** 

**ULS-Cyanine3** 

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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 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.

10X Labeling Solution Wash out mouth with

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.

## Most important symptoms/effects, 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 Regilent-CGHblock No known significant effects or critical hazards.

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

Skin contact : Agilent-CGHblock Causes skin irritation.

ULS-Cyanine3

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

Ingestion

**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

10X Labeling Solution No specific data.

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Inhalation : Rigilent-CGHblock No specific data.

ULS-Cyanine3 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

ULS-Cyanine5 Adverse symptoms may include the following:

reduced fetal weight increase in fetal 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 fetal weight increase in fetal deaths skeletal malformations

ULS-Cyanine5 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations No specific data.

10X Labeling Solution No specific data.Ingestion : Agilent-CGHblock No specific data.

ULS-Cyanine3 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

ULS-Cyanine5 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

10X Labeling Solution No specific data.

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

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.

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**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.

No action shall be taken involving any personal risk ULS-Cyanine5

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.

No action shall be taken involving any personal risk 10X Labeling Solution

or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

| Extin |  |  |
|-------|--|--|
|       |  |  |
|       |  |  |

Suitable extinguishing media

: Agilent-CGHblock Use an extinguishing agent suitable for the

surrounding fire.

Use an extinguishing agent suitable for the **ULS-Cyanine3** 

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.

**Unsuitable extinguishing** 

media

: Agilent-CGHblock ULS-Cyanine3 ULS-Cyanine5

10X Labeling Solution

None known. None known. None known.

None known.

Specific hazards arising

from the chemical

: Agilent-CGHblock

**ULS-Cyanine3** 

In a fire or if heated, a pressure increase will occur

and the container may burst.

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 thermal** decomposition 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

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## Section 5. Fire-fighting measures

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

Special protective actions 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.

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.

ULS-Cyanine5 Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

10X Labeling Solution Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

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### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Agilent-CGHblock

ULS-Cyanine3

ULS-Cyanine5

10X Labeling Solution

**ULS-Cyanine3** 

ULS-Cyanine5

10X Labeling Solution

For emergency responders : 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear

appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear

appropriate respirator when ventilation is inadequate.

Put on appropriate personal protective equipment. 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Put on appropriate personal protective equipment. 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 spilled material. Put on appropriate personal protective equipment.

If specialized 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". If specialized 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". If specialized 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". If specialized 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** : Agilent-CGHblock Avoid dispersal of spilled 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).

Avoid dispersal of spilled material and runoff and **ULS-Cyanine3** contact with soil, waterways, drains and sewers.

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways,

soil or air).

Avoid dispersal of spilled material and runoff and **ULS-Cyanine5** 

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### Section 6. Accidental release measures

10X Labeling Solution

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Avoid dispersal of spilled 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 materials 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

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.

## Section 7. Handling and storage

Precautions for safe handling

Protective measures : 承gilent-CGHblock

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor 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.

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 vapor 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. Empty containers retain product residue

ULS-Cyanine3

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## Section 7. Handling and storage

**ULS-Cyanine5** 

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 vapor 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. Empty containers retain product residue and can be hazardous. Do not reuse container. Put on appropriate personal protective equipment (see Section 8).

Eating, drinking and smoking should be prohibited in

Eating, drinking and smoking should be prohibited in

Eating, drinking and smoking should be prohibited in

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

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

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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.

and can be hazardous. Do not reuse container.

10X Labeling Solution

Advice on general occupational hygiene

: Agilent-CGHblock

**ULS-Cyanine3** 

**ULS-Cyanine5** 

10X Labeling Solution

including any incompatibilities

Conditions for safe storage, : Agilent-CGHblock

**ULS-Cyanine3** 

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 unlabeled 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

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## Section 7. Handling and storage

**ULS-Cyanine5** 

10X Labeling Solution

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 unlabeled 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. 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 unlabeled 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

#### **Control parameters**

Occupational exposure limits

| Ingredient name                       | Exposure limits   |
|---------------------------------------|---|
| <b>U</b> LS-Cyanine3                  |   |
| N,N-Dimethylformamide                 | CA Alberta Provincial (Canada, 6/2018).  Absorbed through skin.  OEL: 30 mg/m³ 8 hours.  OEL: 10 ppm 8 hours.  CA British Columbia Provincial (Canada, 6/2023). Absorbed through skin.  TWA: 5 ppm 8 hours.  CA Ontario Provincial (Canada, 6/2019).  Absorbed through skin.  TWA: 10 ppm 8 hours.  CA Quebec Provincial (Canada, 6/2022).  Absorbed through skin.  TWAEV: 10 ppm 8 hours.  TWAEV: 30 mg/m³ 8 hours.  CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.  STEL: 15 ppm 15 minutes.  TWA: 10 ppm 8 hours. |
| ULS-Cyanine5<br>N,N-Dimethylformamide | CA Alberta Provincial (Canada, 6/2018).   |

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## Section 8. Exposure controls/personal protection

Absorbed through skin. OEL: 30 mg/m<sup>3</sup> 8 hours.

OEL: 10 ppm 8 hours.

CA British Columbia Provincial (Canada, 6/2023). Absorbed through skin.

TWA: 5 ppm 8 hours.

CA Ontario Provincial (Canada, 6/2019).

**Absorbed through skin.** TWA: 10 ppm 8 hours.

CA Quebec Provincial (Canada, 6/2022).

Absorbed through skin. TWAEV: 10 ppm 8 hours. TWAEV: 30 mg/m³ 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.

STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.

#### **Biological exposure indices**

No exposure indices known.

## Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor 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.

# **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.

## Section 8. Exposure controls/personal protection

**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 and safety characteristics

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

| <u>Ap</u> | <u>pearance</u> |
|-----------|-----------------|
|-----------|-----------------|

pН

Physical state : Agilent-CGHblock Liquid.

ULS-Cyanine3 Liquid. [Clear.]

ULS-Cyanine5 Liquid. 10X Labeling Solution Liquid.

Color : Agilent-CGHblock Not available.

ULS-Cyanine3 Pink [Light]
ULS-Cyanine5 Blue. [Light]
10X Labeling Solution Colorless.

Odor : Agilent-CGHblock Not available.

ULS-Cyanine3 Amine-like. [Slight] ULS-Cyanine5 Amine-like. [Slight]

10X Labeling Solution Odorless.

Odor threshold : Agilent-CGHblock Not available.

ULS-Cyanine3 Not available.
ULS-Cyanine5 Not available.
10X Labeling Solution Not available.

Agilent-CGHblock Not available.

ULS-Cyanine3 Not available. ULS-Cyanine5 Not available.

10X Labeling Solution 7 to 8

Melting point/freezing point : Agilent-CGHblock Not available.

ULS-Cyanine3 Not available.
ULS-Cyanine5 Not available.
10X Labeling Solution Not available.

Agilent-CGHblock Not available.
ULS-Cyanine3 Not available.

ULS-Cyanine5 Not available.

10X Labeling Solution 95 to 100°C (203 to 212°F)

Flash point

point, and boiling range

Boiling point, initial boiling

|                            |      | Closed | cup       |    | Ope | n cup  |
|----------------------------|------|--------|-----------|----|-----|--------|
| Ingredient name            | °C   | °F     | Method    | °C | °F  | Method |
| <b>U</b> LS-Cyanine3       |      |        |           |    |     |        |
| N, N-<br>dimethylformamide | 57.5 | 135.5  | DIN 51755 | -  | -   | -      |
| ULS-Cyanine5               |      |        |           |    |     |        |
| N, N-<br>dimethylformamide | 57.5 | 135.5  | DIN 51755 | -  | -   | -      |

**Evaporation rate**: Agilent-CGHblock Not available.

ULS-Cyanine3 Not available.
ULS-Cyanine5 Not available.
10X Labeling Solution Not available.

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## Section 9. Physical and chemical properties and safety characteristics

**Flammability** 

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

Lower and upper explosion limit/flammability limit

Vapor pressure

|   | 10X Labeling Solution      | n           | Not avail |            |          |          |            |
|---|----------------------------|-------------|-----------|------------|----------|----------|------------|
| : |                            | Vapo        | r Pressui | re at 20°C | Vapo     | r pressu | re at 50°C |
|   | Ingredient name            | mm Hg       | kPa       | Method     | mm<br>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-<br>dimethylformamide | 3.7         | 0.49      | -          | -        | -        | -          |
|   | ULS-Cyanine5               |             |           |            |          |          |            |
|   | water                      | 17.5        | 2.3       | -          | 92.258   | 12.3     | -          |
|   | N, N-<br>dimethylformamide | 3.7         | 0.49      | -          | -        | -        | -          |
|   | 10X Labeling<br>Solution   |             |           |            |          |          |            |
|   | water                      | 17.5        | 2.3       | -          | 92.258   | 12.3     | -          |
|   | Trometamol                 | <0.00075006 | <0.0001   | -          | -        | -        | -          |

**Relative vapor density** 

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

**Relative density** 

Solubility(ies)

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

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# Section 9. Physical and chemical properties and safety characteristics

**Auto-ignition temperature** 

| Ingredient name        | °C  | °F  | Method |
|------------------------|-----|-----|--------|
| <b> L</b> S-Cyanine3   |     |     |        |
| N, N-dimethylformamide | 445 | 833 | -      |
| ULS-Cyanine5           |     |     |        |
| N, N-dimethylformamide | 445 | 833 | -      |

**Decomposition temperature**: Agilent-CGHblock Not available.

ULS-Cyanine3 Not available.

ULS-Cyanine5 Not available.

10X Labeling Solution Not available.

Agilent-CGHblock Not available.

ULS-Cyanine3 Not available.

ULS-Cyanine5 Not available.

**Particle characteristics** 

**Viscosity** 

Median particle size: Agilent-CGHblockNot applicable.ULS-Cyanine3Not applicable.

10X Labeling Solution

ULS-Cyanine5 Not applicable.

10X Labeling Solution Not applicable.

Not applicable.

## Section 10. Stability and reactivity

Reactivity : Agilent-CGHblock No specific test data related to reactivity available for

this product or its ingredients.

Not available.

ULS-Cyanine3 No specific test data related to reactivity available for

this product or its ingredients.

ULS-Cyanine5 No specific test data related to reactivity available for

this product or its ingredients.

10X Labeling Solution No specific test data related to reactivity available for

this product or its ingredients.

**Chemical stability**: Agilent-CGHblock The product is stable.

ULS-Cyanine3 The product is stable.
ULS-Cyanine5 The product is stable.
10X Labeling Solution The product is stable.

Possibility of hazardous reactions

: Agilent-CGHblock Under normal conditions of storage and use,

hazardous reactions will not occur.

ULS-Cyanine3 Under normal conditions of storage and use,

hazardous reactions will not occur.

ULS-Cyanine5 Under normal conditions of storage and use,

hazardous reactions will not occur.

10X Labeling Solution Under normal conditions of storage and use,

hazardous reactions will not occur.

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## Section 10. Stability and reactivity

: Agilent-CGHblock

|                        | ULS-Cyanine3<br>ULS-Cyanine5<br>10X Labeling Solution                       | No specific data.<br>No specific data.<br>No specific data.  |
|------------------------|---|--|
| Incompatible materials | : Agilent-CGHblock<br>ULS-Cyanine3<br>ULS-Cyanine5<br>10X Labeling Solution | May react or be incompatible with oxidizing materials.  May react or be incompatible with oxidizing materials.  May react or be incompatible with oxidizing materials.  May react or be incompatible with oxidizing materials. |

**Hazardous decomposition** products

**Conditions to avoid** 

: Agilent-CGHblock Under normal conditions of storage and use,

No specific data.

hazardous decomposition products should not be

produced.

**ULS-Cyanine3** Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

ULS-Cyanine5 Under normal conditions of storage and use,

hazardous decomposition products should not be

10X Labeling Solution 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                |
|--|---|-------------------|------------------------------------|-------------------------|
| Agilent-CGHblock sodium diethyldithiocarbamate | LD50 Oral   | Rat               | 1500 mg/kg                         | -                       |
| ULS-Cyanine3                                   |   |                   |                                    |                         |
| N,N-Dimethylformamide                          | LC50 Inhalation Vapor<br>LC50 Inhalation Vapor<br>LD50 Oral | Rat<br>Rat<br>Rat | 3421 ppm<br>1948 ppm<br>4000 mg/kg | 1 hours<br>4 hours<br>- |
| ULS-Cyanine5                                   |   |                   |                                    |                         |
| N,N-Dimethylformamide                          | LC50 Inhalation Vapor<br>LC50 Inhalation Vapor<br>LD50 Oral | Rat<br>Rat<br>Rat | 3421 ppm<br>1948 ppm<br>4000 mg/kg | 1 hours<br>4 hours<br>- |
| 10X Labeling Solution<br>Trometamol            | LD50 Dermal   | Rat               | >5000 mg/kg                        | -                       |

#### **Irritation/Corrosion**

| Product/ingredient name                      | Result   | Species          | Score        | Exposure       | Observation |
|--|--|------------------|--------------|----------------|-------------|
| <b>VLS-Cyanine3</b><br>N,N-Dimethylformamide | Eyes - Severe irritant                             | Rabbit           | -            | 100 %          | -           |
| ULS-Cyanine5<br>N,N-Dimethylformamide        | Eyes - Severe irritant                             | Rabbit           | -            | 100 %          | -           |
| 10X Labeling Solution Trometamol             | Skin - Moderate irritant<br>Skin - Severe irritant | Rabbit<br>Rabbit | <br> -<br> - | 25 %<br>500 mg | -           |

#### **Sensitization**

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|---|------------------------|--------------|-------------|-------|
|---|------------------------|--------------|-------------|-------|

## Section 11. Toxicological information

Not available.

**Mutagenicity** 

Conclusion/Summary

: Not available.

**Carcinogenicity** 

Conclusion/Summary

: Not available.

**Classification** 

| Product/ingredient name                        | IARC | NTP | ACGIH |
|--|------|-----|-------|
| Agilent-CGHblock sodium diethyldithiocarbamate | 3    | -   | -     |
| ULS-Cyanine3<br>N,N-Dimethylformamide          | 2A   | -   | A3    |
| ULS-Cyanine5<br>N,N-Dimethylformamide          | 2A   | -   | A3    |

**Reproductive toxicity** 

**Conclusion/Summary**: Not available.

**Teratogenicity** 

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

| Name      | 3 3 3      | Route of exposure | Target organs                |
|-----------|------------|-------------------|------------------------------|
| Tometamol | Category 3 |                   | Respiratory tract irritation |

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely

routes of exposure

: Agilent-CGHblock Routes of entry anticipated: Oral, Dermal, Inhalation,

eves.

ULS-Cyanine3 Routes of entry anticipated: Oral, Dermal, Inhalation,

Eyes

ULS-Cyanine5 Routes of entry anticipated: Oral, Dermal, Inhalation,

Eyes.

10X Labeling Solution Routes of entry anticipated: Oral, Dermal, Inhalation,

Eyes.

Potential acute health effects

**Eye contact** : Agilent-CGHblock

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.
No known significant effects or critical hazards.

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Ingestion

Inhalation

Ingestion

## Section 11. Toxicological information

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.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Agilent-CGHblock No known significant effects or critical hazards.

ULS-Cyanine No known significant effects or critical hazards.
ULS-Cyanine No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

**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

10X Labeling Solution No specific data.Agilent-CGHblock No specific data.

ULS-Cyanine3 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

ULS-Cyanine5 Adverse symptoms may include the following:

reduced fetal weight increase in fetal 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 fetal weight increase in fetal deaths skeletal malformations

ULS-Cyanine5 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations No specific data.

10X Labeling Solution No specific data.Agilent-CGHblock No specific data.

ULS-Cyanine3 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

ULS-Cyanine5 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

10X Labeling Solution No specific data.

<u>Delayed and immediate effects and also chronic effects from short and long term exposure</u>

<u>Short term exposure</u>

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## Section 11. Toxicological information

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

General : Agilent-CGHblock

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 May cause cancer. Risk of cancer depends on

duration and level of exposure.

ULS-Cyanine5 May cause cancer. Risk of cancer depends on

duration and level of exposure.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

10X Labeling Solution
 Mutagenicity
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

ULS-Cyanine3

No known significant effects or critical hazards.

**Reproductive toxicity**: Agilent-CGHblock No known significant effects or critical hazards.

ULS-Cyanine3 May damage fertility or the unborn child.
ULS-Cyanine5 May damage fertility or the unborn child.

10X Labeling Solution No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

| Product/ingredient name       | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | Inhalation<br>(vapors)<br>(mg/l) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|-------------------------------|------------------|-------------------|--------------------------------|----------------------------------|--|
| Agilent-CGHblock              |                  |                   |                                |                                  |  |
| Agilent-CGHblock              | 150000.0         | N/A               | N/A                            | N/A                              | N/A  |
| sodium diethyldithiocarbamate | 1500             | N/A               | N/A                            | N/A                              | N/A  |
| ULS-Cyanine3                  |                  |                   |                                |                                  |  |
| ULS-Cyanine3                  | 6552.0           | 2754.8            | N/A                            | 20.2                             | N/A  |
| N,N-Dimethylformamide         | 4000             | 1500              | N/A                            | 11                               | N/A  |
| ULS-Cyanine5                  |                  |                   |                                |                                  |  |
| ULS-Cyanine5                  | 6552.0           | 2754.8            | N/A                            | 20.2                             | N/A  |
| N,N-Dimethylformamide         | 4000             | 1500              | N/A                            | 11                               | N/A  |

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# Section 12. Ecological information

## **Toxicity**

| Product/ingredient name                        | Result   | Species   | Exposure             |
|--|--|---|----------------------|
| Agilent-CGHblock sodium diethyldithiocarbamate | Acute EC50 1400 μg/l Fresh water   | Algae - Chlorella pyrenoidosa   | 96 hours             |
| ,  | Acute LC50 910 μg/l Fresh water<br>Acute LC50 6900 μg/l Fresh water      | Daphnia - <i>Daphnia magna</i><br>Fish - <i>Poecilia reticulata</i>             | 48 hours<br>96 hours |
| ULS-Cyanine3                                   |  |   |                      |
| N,N-Dimethylformamide                          | Acute EC50 4500 mg/l Fresh water<br>Acute LC50 >100000 µg/l Marine water | Daphnia - <i>Daphnia magna</i> Crustaceans - <i>Crangon crangon</i> - Adult     | 48 hours<br>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<br>Chronic NOEC 0.1 ml/L Fresh water  | Daphnia - <i>Daphnia magna</i><br>Fish - <i>Oncorhynchus mykiss</i> -<br>Embryo | 21 days<br>30 days   |
| ULS-Cyanine5                                   |  |   |                      |
| N,N-Dimethylformamide                          | Acute EC50 4500 mg/l Fresh water<br>Acute LC50 >100000 µg/l Marine water | Daphnia - <i>Daphnia magna</i> Crustaceans - <i>Crangon crangon</i> - Adult     | 48 hours<br>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<br>Chronic NOEC 0.1 ml/L Fresh water  | Daphnia - <i>Daphnia magna</i><br>Fish - <i>Oncorhynchus mykiss</i> -<br>Embryo | 21 days<br>30 days   |
| 10X Labeling Solution                          |  |   |                      |
| Trometamol                                     | Acute EC50 >980 mg/l Fresh water Acute NOEC 520 mg/l Fresh water         | Daphnia<br>Daphnia  | 48 hours<br>48 hours |

## Persistence and degradability

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

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## **Section 12. Ecological information**

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

#### **Bioaccumulative potential**

| Product/ingredient name                        | LogPow | BCF  | Potential |
|--|--------|------|-----------|
| Agilent-CGHblock sodium diethyldithiocarbamate | -1.1   | -    | Low       |
| ULS-Cyanine3<br>N,N-Dimethylformamide          | -1.01  | 0.79 | Low       |
| ULS-Cyanine5<br>N,N-Dimethylformamide          | -1.01  | 0.79 | Low       |
| 10X Labeling Solution<br>Trometamol            | -2.31  | -    | Low       |

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

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

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## Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

**Additional information** 

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 : Not available.

to IMO instruments

## Section 15. Regulatory information

**Canadian lists** 

Canadian NPRI : The following components are listed: N,N-dimethylformamide

**CEPA Toxic substances**: None of the components are listed.

**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** 

Canada : Not determined.
United States : Not determined.

## Section 16. Other information

**History** 

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**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations 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)

N/A = Not available UN = United Nations

Procedure used to derive the classification

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## **Section 16. Other information**

| Classification  | Justification  |
|---|--|
| <b>A</b> gilent-CGHblock  |  |
| SKIN IRRITATION - Category 2  | Calculation method                                       |
| EYE IRRITATION - Category 2A  | Calculation method                                       |
| ULS-Cyanine3 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1 TOXIC TO REPRODUCTION - Category 1 | Calculation method Calculation method Calculation method |
| ULS-Cyanine5  |  |
| EYE IRRITATION - Category 2A  | Calculation method                                       |
| CARCINOGENICITY - Category 1  | Calculation method                                       |
| TOXIC TO REPRODUCTION - Category 1  | Calculation method                                       |

**<sup>▼</sup>** Indicates information that has changed from previously issued version.

#### **Notice to reader**

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