

SECTION 1: IDENTIFICATION**1.1 Product identifier**

Product Name NISH Detection 4

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

Identified uses For research use only. Not for diagnostic use.

1.3 Details of the supplier of the data sheet

Company Empire Genomics Corp.
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Depew, NY 14043

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SECTION 2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture.

2.2 Label elements including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards

None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Chemical Characterization**

Mixtures.

3.2 Dangerous Components

Chemical Name	CAS No	EINECS No	Weight %
Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H - isothiazol-3-one (3:1)	55965-84-9	205-358-3	0.0015-0.06

SECTION 4. FIRST AID MEASURES**4.1 Description of first aid measures**

General information

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

Inhalation	Allow victim to breath fresh air. Allow the victim to rest. Get medical attention if symptoms occur.
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. Drink plenty of water. Consult a physician.
Skin Contact	Rinse immediately with plenty of water. Get medical attention if symptoms occur.
Eye Contact	Flush immediately with plenty of water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses if present.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in Section 2.2 and/or in Section 11.

4.3 Indication of any immediate medical attention and special treatment needed.

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use high volume water jet.

5.2 Special hazards

Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for fire fighters

Wear self-contained breathing apparatus and protective suit.

5.4 Further information

Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Always use personal protection equipment. Avoid dust formation. Avoid breathing dust.

6.2 Environmental Precautions

No special environmental protection measures are necessary.

6.3 Methods and material for containment and clean up

Absorb with liquid-binding material (e.g., sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

Wear personal protective equipment as described in Section 8 of the safety data sheet.

SECTION 7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Provide good ventilation in the process area. Always wear recommended personal protective equipment. Avoid contact with skin, eyes, and clothing.

7.2 Conditions for safe storage, including any incompatibles

Store at 2-8°C under sterile conditions. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from food and drink.

7.3 Specific end use(s)

For research use only.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

Exposure Limits

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Exposure controls

Personal Protective Equipment

Wear protective gloves/protective clothing and eye/face protection. Only wear fitting, comfortable, and clean protective clothing.

Respiratory Protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Hand Protection

Tested protective gloves are to be worn: DIN-/EN-Norms: EN ISO 374.

Eye Protection

Tightly sealed safety glasses.

Skin and Body Protection

Wear suitable protective clothing.

Environmental exposure controls

Refer to Section 6. No further action is necessary.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

Appearance: Liquid.

9.2 Other information

No data available.

SECTION 10. STABILITY AND REACTIVITY
10.1 Reactivity

No data available.

10.2 Stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Exposure to light and heat.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

SECTION 11. TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
Toxicological information
Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LD50 (inhalation, rat/mouse)
Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H - isothiazol-3-one (3:1)	66 mg/kg	87.12 mg/kg	0.171 mg/L (aerosol; 4 h)

Principle Routes of exposure
Potential Health Effects

Inhalation

May be harmful if inhaled.

Ingestion

May be harmful if swallowed.

Skin contact	Frequently or prolonged contact with skin may cause dermal irritation.
Eye contact	May cause eye irritation in susceptible persons.
Carcinogenetic effects	None.
Mutagenic effects	No data available.
Reproductive toxicity	No data available.
Sensitization	No data available.
Target organ effects	No data available.
Other adverse effect	No data available.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data
Mixture of 5-Chloro-2- methyl-4-isothiazolin-3-one and 2-Methyl-2H - isothiazol-3-one (3:1)	-	LC50: 0.18 mg/L (48 h) (D. magna) NOEC: 0.1 mg/L (21 d) (D. magna)	LC50: 0.19 mg/L (96 h) (O. mykiss) NOEC: 0.098 mg/L (35 d) (O. mykiss)

12.2 Persistence and degradability

Components:

Mixture of 5-Chloro-2- methyl-4-isothiazolin-3- one and 2-Methyl-2H - isothiazol-3-one (3:1):

Biodegradability:	Aerobic: 3%
	Inoculum: activated sludge
	Concentration: 0.003 mg/L
	Result: Not rapidly biodegradable
	Biodegradation: 62%
	Exposure time: 29 d
	Method: OECD Test Guideline 301B
	GLP: Yes
	Remarks: The 10 day time window criterion is not fulfilled.

12.3 Bioaccumulation potential

Components:

Mixture of 5-Chloro-2- methyl-4-isothiazolin-3- one and 2-Methyl-2H - isothiazol-3-one (3:1):

Partition coefficient: n-octanol/water	Pow: 0.326 (75 °F / 24 °C) Method: OECD Test Guideline 107 GLP: Yes Remarks: Bioaccumulation is not expected.
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12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product shall comply with all the requirements of all applicable local, regional, national/federal regulations.

SECTION 14. TRANSPORT INFORMATION**IATA/ADR/DOT-US/IMDG**

Not dangerous goods. Not regulated by transport regulations.

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	Not applicable
14.4 Packaging group	Not applicable
14.5 Environmental hazards	Not applicable

SECTION 15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****US Federal Regulations****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312

No SARA Hazards.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants, as defined by the US Clean Air Act.

Clean Water Act

This product does not contain any hazardous substances listed under the US Clean Water Act.

15.2 Chemical safety assessment

No data available.

SECTION 16. OTHER INFORMATION**Disclaimer**

The information contained herein is believed to be correct at time of issue but may not be all-inclusive and should be used as a guide only. Further, it is recommended that the product be handled and used by appropriately trained personnel only. Empire Genomics Corp. shall not be held liable for any damage resulting from handling or from contact with the product.