

# Safety Data Sheet (SDS)



GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

<b>1. Identification of the Substance/ Preparation &amp; of the Company/ Undertaking</b>
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**Product Category:** Labeled FISH Probe with Hybridization Buffer  
**SKU:**  
**Use:** Labeled FISH Probe with Hybridization Buffer is used in Fluorescence In Situ Hybridization (FISH).  
**Manufacturer / Supplier:** Empire Genomics LLC  
 700 Michigan Ave  
 Suite 200  
 Buffalo NY 14203 USA  
**Telephone:** +1 716 856 3873  
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<b>2. Hazards Identification</b>
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Classification and Label Elements:

	<p>Signal Word: Danger</p> <p>GHS08 Repr.1B</p> <p>H360d May damage the unborn child.          P262 Do not get in eyes, on skin, or on clothing.          P501 Dispose of contents/container to local/regional/national/international regulations.          P280 Wear protective gloves/protective clothing/eye protection/face protection.          P309+P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.          P201 Obtain special instructions before use.</p>
	<p>GHS07 Skin Irrit. 2 Eye Irrit. 2</p> <p>H315+H320 Causes skin and eye irritation.          P262 Do not get in eyes, on skin, or on clothing.          P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.          P313 Get medical advice/attention.          P501 Dispose of contents/container to local/regional/national/international regulations.          P280 Wear protective gloves/protective clothing/eye protection/face protection.</p>

P301+P310 IF SWALLOWED: Immediately call a  
POISON CENTER or doctor/physician.

Hazard-determining components of labeling: Formamide

Overview and Potential Health Effects: May cause harm to the unborn child.  
Avoid contact with skin and eyes.

HMIS		NFPA	
Health	2		
Flammability	1		
Reactivity	0		
Personal Protection			

### 3. Composition/Information on Ingredients

Ingredient	CAS #	EC #
Formamide	75-12-7	200-842-0
Dextran Sulfate	9011-18-1	618-471-1
20X SSC		
Sodium chloride	7647-14-5	231-598-3
Tri-Sodium citrate dihydrate	6132-04-3	200-675-3
Water	7732-18-5	231-791-2

This preparation of DNA is stored as a solution in formamide (50-71%, in a volume of 10-200 microlitres / vial), pH 7.0-8.0, plus 10% dextran sulphate, 2X SSC and H<sub>2</sub>O.

The supplied hybridization buffer is approximately 50-71%% formamide in a volume of 50-200 microlitres / vial.

Components with limit values that require monitoring at the workplace: 75-12-7 Formamide

EINECS: 200-842-0

Formamide Repr. Cat. 2; T; R 61 40,0%

WEL (Great Britain)

MAC (Netherlands)

Short-term value: 56 mg/m<sup>3</sup>, 30 ppm

Long-term value: 37 mg/m<sup>3</sup>, 20 ppm

16 mg/m<sup>3</sup>, 9 ppm

### 4. First-aid Measures

Inhalation	May cause irritation to the respiratory tract. Move person into fresh air and seek medical advice.
Eye Contact	Flush with copious amounts of water for at least 15 minutes while keeping eyes open. Seek medical attention.
Skin Contact	May cause skin irritation. Wash with copious amounts of water and remove clothing that came into contact with the solutions. Seek medical attention. Wash clothing before wearing.
Ingestion	If person is conscious, give large amounts of water to drink. Seek medical attention immediately.
Punctures:	Wash affected area with antiseptic soap and warm water for 15 minutes. Consult a physician.
Clothing:	Wash contaminated clothing before reuse.

### 5. Fire Fighting Measures



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Flammability Information: Product is not self igniting. Product is not explosive.  
Extinguishing Methods: CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.  
Protective equipment: Respiratory protection not normally required unless exposure limits for released components are exceeded. Keep breathing equipment ready.  
Person-related safety precautions: See Personal Protection.

**6. Accidental Release Measures**

Wear: Chemical-resistant safety goggles, gloves and rubber boots. Keep breathing equipment ready.  
Spill cleanup: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ventilate area and wash spill site after material pickup is complete.  
Measures for environmental protection: Do not allow to enter drainage system, surface or ground water.

**7. Handling and Storage**

Handling: This product has not been viability tested. It should be treated as if it were infectious using the appropriate Good Laboratory Practice and experienced staff with appropriate training.  
No special precautions necessary if used correctly.  
Wear gloves when handling.  
Avoid contact with skin and eyes, avoid inhalation or ingestion.  
Storage: Store at ≤ -18 °C or less whilst in not in use.  
Store in the dark / away from light.  
Avoid multiple/frequent freeze/thaw cycles. Aliquots should be prepared if repeated use is needed.  
Protect from heat and direct sunlight.  
Shelf life 1- 2 years under recommended conditions.

**8. Exposure Controls / Personal Protection**

General Protective and Hygienic Measures: Keep away from foodstuffs, beverages and food.  
Immediately remove contaminated clothing.  
Wash hands during breaks and at the end of the work.  
Store protective clothing separately.  
Breathing equipment: Not necessary, if room is well-ventilated.  
Take precautions, if chemical concentrations exceed the exposure limits (if any) listed above.  
Protection of hands: The gloves serve to protect the user against splashes. For safety reasons they should be changed immediately after wetting. Since the product is in fact a preparation out of several substances, no specific information can be given on the permeation breakthrough time. The choice of suitable gloves depends not only on the material, but also on other quality features and must, therefore, be checked with the respective manufacturer. As far as we know, disposable gloves, among other things out of nitriles, are suitable. Nevertheless, this recommendation is not intended to replace a suitability test, which is essential and must be carried out under the respective conditions of use.  
Eye protection: Safety glasses recommended.

**9. Physical and Chemical Properties**

A. Appearance Form: Liquid  
B. Odor: Odorless  
C. Odor Threshold: No data available  
D. pH: 7.0-8.0  
E. Melting point/freezing point: No data available  
F. Initial boiling point & boiling range: No data available  
G. Flash point: 154 °C / 309 °F  
H. Evaporation rate: No data available  
I. Flammability (solid, gas): Product is not self igniting  
J. Upper/lower flammability/explosive limits: Product is not explosive  
K. Vapor pressure: No data available



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L. Vapor density	No data available
M. Relative density	No data available
N. Water solubility	Soluble
O. Partition coefficient:	No data available
P. Auto-ignition temperature	No data available
Q. Decomposition temperature	No data available
R. Viscosity	No data available
S. Explosive properties	No data available
T. Oxidizing properties	No data available
U. Density at 20°C	1.1 g /cm <sup>3</sup>

**10. Stability and Reactivity**

Stability:	Stable under recommended conditions of use and storage.
Incompatibilities/materials to avoid:	Avoid mixing with strong oxidizing and reducing agents and strong acids and bases. Avoid excess heat and protect from light.
Hazardous decomposition or polymerization:	Not Available.

**11. Toxicological Information**

Dangerous Reactions:	No dangerous reactions known. DR
Dangerous products of Decomposition:	No dangerous decomposition products known.
Acute toxicity:	
LD/LC50 values that are relevant for classification:	No data available for this product.
Sensitization:	No sensitizing effect known.
Additional toxicological information:	The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: Toxic

**12. Ecological Information**

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. In general laboratory waste is under the special supervision of the authorities. Refer to applicable local regulations.

European waste catalogue: Please consult the responsible regulatory body for the assignment of disposal codes according to European Waste Catalogue.

**13. Disposal Considerations**

Cleanup and disposal in accordance to local, regional and national environmental regulations.

Following waste disposal key number are possible:

180106: chemicals consisting of or containing dangerous substances

Unclean packaging: There are no uniform EC-regulations for the disposal of packaging as waste.

Recommendation: Non contaminated packaging can be used for recycling.

For disposal of contaminated packaging, please refer to applicable local regulations.

**14. Transport Information**

Land transport ADR/RID (cross-border) ADR/RID-GGVS/E Class: - Remarks: Not restricted

IMDG Class: - Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:ICAO/IATA Class: - Not classified as hazardous for transport.

**15. Regulatory Information**

MSDS prepared in accordance with Regulation (EC) No. 1272/2008. It contains information as required by the Regulation.

Hazard Statements



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**Precautionary Statements**

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- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P309+P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.
- P313 Get medical advice/attention.
- P501 Dispose of contents/container to local/regional/national/international regulations.

**16. Other Information**

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 LLC shall not be held liable for any damage resulting from handling or from contact with the product.