

MATERIAL SAFETY DATA SHEET-v4

Product Oligo & DNA hybridisation mixture

Cat. no. R021R.0000, R024R.0000

**Pan
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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the product

Name : Oligo & DNA hybridisation mixture

Product code : R021R.0000, R024R.0000

Produced and Marketed by

PanPath B.V.

Science Park Amsterdam

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2. COMPOSITION AND INFORMATION ON INGREDIENTS

- Sodium Chloride (CAS-No. 7647-14-5)
- Tri Sodium citrate dihydrate (CAS-No. 6132-04-3)
- Formamid (CAS-No. 75-12-7; EINECS-No. 200-842-0; Molecular weight 45.04; Molecular formula HCONH₂)
- Dextrane sulfate (CAS-No. 9011-18-1)
- Sodiumdodecylsulfate (CAS-No. 151-21-3; Xn; R: 20/22-38)
- Fish sperm DNA

3. IDENTIFICATION OF HAZARDS AND EFFECTS

Conditions to avoid

Excess heat, flames, or pressure.

Substances to avoid

No data available.

Hazardous combustion or decomposition products

Nitrogen oxides, carbon monoxide and carbon dioxide.

Fire and explosion hazards

Inflammable. Emits toxic fumes under fire conditions. Keep away from inflammable sources.

4. FIRST AID MEASURES

EXPOSURE	FIRST AID MEASURES
Inhalation	Fresh air. Consult doctor if feeling unwell.
Eye contact	Flush with copious amounts of water with eyelid held wide open for at least 15 minutes. Summon eye specialist if necessary.
Skin contact	Wash with copious amounts of water. Remove contaminated clothing.
Ingestion	Summon doctor immediately! Make victim drink plenty if water. Watch out for vomiting: danger of breathing difficulties. Keep bronchial tubes free.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media : water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedure : not required.

6. ACCIDENTAL RELEASE MEASURES

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Take up with liquid-absorbent material. Forward for disposal and clean up affected area. Replace contaminated clothing immediately.

7. HANDLING & STORAGE INFORMATION

Handling information

Keep closed when not in use. Wear suitable protective clothing when handling fluid.

Storage information

Store at 2-8 °C.

8. PERSONAL PRECAUTIONS & PROTECTION

Personal precautions

The usual precautions taken when handling chemicals should be observed. Refer to product data sheet for recommended specific use. Do not inhale vapors, do not get in eyes, on skin or clothing. Wash hands thoroughly after handling.

Personal protection

Respiratory protection : required when vapors/aerosols are generated. Preferably work in a chemical fume hood or wear adequate mask with filter (according to DIN 3181 for vapors of organic compounds).

Skin protection : Required. Wear suitable protective clothing and gloves.

Eye protection : Required. Wear safety glasses or goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	viscous liquid	Flashing point:	no data available
Color:	clear, slightly colored	Explosion limits	no data available
Odor:	odorless	Vapor pressure (20°C):	no data available
pH	no data available	Relative density:	no data available
Viscosity _{dynamic} (20°C):	no data available	Solubility in water:	one gram NaCl dissolves in 2.8 ml water at 25°C. Sodium citrate is soluble in 1.3 parts water. Formamid is completely miscible with water.
Boiling range:	no data available	log P(o/w):	no data available
Melting point:	no data available		
Autoflammability:	no data available		

10. STABILITY & REACTIVITY

Stability

The product is stable, under normal handling and storage conditions.

Reactivity

No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological information

Low toxicity. Preparation is moderately irritating to skin and mucous membranes. Formamid is a possible teratogen.

Toxicity:	NaCl:	LD ₅₀ (oral, rats):	3.75 g/kg
	Nacitrate:	LD ₅₀ (i.p., rats):	6.0 mmol/kg
	Formamid:	LD ₅₀ (oral, rats):	5.6 g/kg

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Acute effects

May be harmful by inhalation, ingestion or skin absorption. Vapor or mist is irritating to the eyes, mucous membranes and upper respiratory tract. Causes skin irritation.

Chronic effects

May cause birth defects.

12. ECOLOGICAL INFORMATION

Biologic degradation: no data available.

Behavior in environmental compartments: no data available.

Ecotoxic effects: slightly hazardous to water supplies.

13. DISPOSAL CONSIDERATIONS

Product: there are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging: disposal in accordance with local provisions. Contaminated packages should be treated the same as the product itself.

14. TRANSPORT INFORMATION

This product is not subject to current regulations for transportation of hazardous goods.

15. REGULATORY INFORMATION

Labeling according to ECC directives.

R	S	SYMBOL
34, 35, 37	26-36/37/39-45	C
61	53-45	T (product R024R.0000 only)

Label precautionary statements: harmful by inhalation, in contact with skin and if swallowed. May cause birth defects. Irritating to eyes, respiratory system and skin.

16. ADDITIONAL INFORMATION (IF APPLICABLE)

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. We make no warranty express or implied, with respect to the information and assume no liability. Product users should determine the suitability of this information for their own uses.