

## 1. Chemical and company identification

Name of chemical (Product name) Proximity Ligation 1 Enzyme Mix

### Supplier's company name, address and phone number

Company Name TOMY Digital Bio  
Address 2-9-1 Ikenohata  
Taito-Ku, Tokyo 110-0008  
Japan  
Telephone (831) 713-4465  
Website dovetailgenomics.com  
Emergency phone number +1 760 476 3960  
Access code 334943

### Recommended use of the chemical and restrictions on use

Intended use Molecular Biology Kit.  
Restrictions on use Use in accordance with manufacturer's recommendations.

## 2. Hazards identification

### GHS classification

The product is not classified according to GHS.

### GHS label elements

Pictograms None.  
Signal words None.  
Hazard statement The mixture does not meet the criteria for classification.

### Precautionary statement

Prevention Observe good industrial hygiene practices.  
Response Wash hands after handling.  
Storage Store away from incompatible materials.  
Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification None known.

### Main symptoms and emergency overview

Main symptoms Direct contact with eyes may cause temporary irritation.  
Emergency overview Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.

## 3. Composition/information on ingredients

Substance or mixture Mixture

Contains no hazardous ingredients according to GHS.

## 4. First aid measures

If inhaled Move to fresh air. Call a physician if symptoms develop or persist.  
If on skin Wash off with soap and water. Get medical attention if irritation develops and persists.  
If in eyes Rinse with water. Get medical attention if irritation develops and persists.  
If swallowed Rinse mouth. Get medical attention if symptoms occur.  
Most important symptoms/effects, acute and delayed Direct contact with eyes may cause temporary irritation.  
Protection of first-aid responders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.  
Notes to physician Treat symptomatically.

## 5. Fire-fighting measures

Extinguishing media Use extinguishing agent suitable for type of surrounding fire.  
Extinguishing media to avoid None known.  
Specific hazards During fire, gases hazardous to health may be formed.

<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk.
<b>Protection of fire-fighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.
<b>Methods and materials for containment and cleaning up</b>	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p> <p>None known.</p>
<b>Prevention of secondary hazards</b>	

## 7. Handling and storage

<b>Handling</b>	
<b>Technical measures (e.g. Local and general ventilation)</b>	Provide adequate ventilation.
<b>Safe handling advice</b>	Observe good industrial hygiene practices.
<b>Contact avoidance measures</b>	Strong oxidizing agents. For further information, please refer to section 10 of the SDS.
<b>Hygiene measures</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
<b>Storage</b>	
<b>Safe storage conditions</b>	Store away from incompatible materials (see Section 10 of the SDS).
<b>Safe packaging materials</b>	Store in original tightly closed container.

## 8. Exposure controls/personal protection

<b>Control parameters</b>	Follow standard monitoring procedures.
<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Engineering measures</b>	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Hand protection</b>	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
<b>Eye protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear suitable protective clothing.

## 9. Physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Form</b>	Clear liquid.
<b>Color</b>	Colorless.
<b>Odor</b>	Mild.
<b>Melting point/freezing point</b>	Not available.
<b>Boiling point, initial boiling point, and boiling range</b>	Not available.
<b>Combustibility</b>	Not applicable.
<b>Lower and upper explosion limit / flammability limit</b>	
<b>Explosive limit - lower (%)</b>	Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Flash point</b>	Not available.
<b>Auto-ignition temperature</b>	739.04 °F (392.8 °C)
<b>Decomposition temperature</b>	Not available.
<b>pH</b>	7.5
<b>Kinematic viscosity</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water) (log value)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Density and/or relative density</b>	
<b>Density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Particle characteristics</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

<b>Acute toxicity</b>	Not expected to be acutely toxic.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer. Although there is no evidence that the enzyme in this mixture induces specific respiratory hypersensitivity, all proteins are potential respiratory allergens and may result in respiratory sensitization in certain individuals after repeated and/or prolonged inhalation exposure.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Other information</b>	The toxicological properties of this material have not been fully investigated.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulation</b>	No data available.
<b>Mobility in soil</b>	No data available for this product.

<b>Hazardous to the ozone layer</b>	No data available.
<b>Other hazardous effects</b>	No data available.

### 13. Disposal considerations

<b>Residual waste</b>	Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>Local disposal regulations</b>	Contract with a disposal operator licensed by the Law on Disposal and Cleaning. When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.

### 14. Transport information

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**National regulations** Follow regulation in section 15 for domestic transportation.

### 15. Regulatory information

#### Industrial Safety and Health Act

**Notifiable substances (SDS and Risk Assessment) (Ordinance No, Concentration)**

Not regulated.

**Labeling substances**

Not regulated.

#### Poisonous and Deleterious Substances Control Act

**Specified poisonous substances**

Not regulated.

**Poisonous substances**

Not regulated.

**Deleterious substances**

Not regulated.

#### Act on the Regulation of Manufacture and Evaluation of Chemical Substances

**Class I specified chemical substances**

Not regulated.

**Class II specified chemical substances**

Not regulated.

**Monitoring chemical substances**

Not regulated.

**Priority Assessment Chemical Substances (PACs)**

Not regulated.

#### Law concerning Pollutant Release and Transfer Register from April 1, 2023

**Specified class 1 substances (substance name, control number and content)**

Not regulated.

**Class 1 substances (substance name, control number and content)**

Not regulated.

**Class 2 substances (substance name, control number and content)**

Not regulated.

**Fire Service Act** Not dangerous goods under Fire Service Law

**Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule** Not regulated.

**Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule**

**Air Law, Enforcement Rule** Not regulated.

**Explosives Control Act**

Not regulated.

## 16. Other information

### Bibliography

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
Japan Chemical Industry Association (JCIA) GHS Guideline, June 2019  
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits  
JIS Z 7252:2019 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"  
JIS Z 7253:2019 Hazard communication of chemicals based on GHS - Labelling and Safety Data Sheet (SDS)  
National Toxicology Program (NTP) Report on Carcinogens

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