

## 1. Chemical and company identification

**Name of chemical (Product name)** 100mM CaCl<sub>2</sub>

### 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

Chemical name or generic name	CAS Number	Gazette notification		Concentration (%)
		ENCS no.	ISHL no.	
Calcium chloride, dihydrate	10035-04-8	(1)-176	(1)-176	1.1
Other components below reportable levels				0 - 100

**Chemical formula** Ca-Cl<sub>2</sub> (10035-04-8)

## 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.
<b>5. Fire-fighting measures</b>	
Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Extinguishing media to avoid	None known.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>6. Accidental release measures</b>	
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	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.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Prevention of secondary hazards	Clean up in accordance with all applicable regulations.
<b>7. Handling and storage</b>	
<b>Handling</b>	
Technical measures (e.g. Local and general ventilation)	No specific recommendations.
Safe handling advice	Observe good industrial hygiene practices.
Contact avoidance measures	Strong oxidizing agents. For further information, please refer to section 10 of the SDS.
Hygiene measures	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>	
Safe storage conditions	Store away from incompatible materials (see Section 10 of the SDS).
Safe packaging materials	Store in original tightly closed container.
<b>8. Exposure controls/personal protection</b>	
Control parameters	Follow standard monitoring procedures.
Occupational exposure limits	No exposure limits noted for ingredient(s).
Engineering measures	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>	
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Eye protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear suitable protective clothing.
<b>9. Physical and chemical properties</b>	
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.

Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Combustibility	Not applicable.
<b>Lower and upper explosion limit / flammability limit</b>	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	Not available.
Kinematic viscosity	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapor pressure	Not available.
<b>Density and/or relative density</b>	
Density	Not available.
Relative density	Not available.
Vapor density	Not available.
Particle characteristics	Not available.
<b>Other information</b>	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

## 10. Stability and reactivity

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

## 11. Toxicological information

Acute toxicity	Not expected to be acutely toxic.
----------------	-----------------------------------

Acute toxicity, oral

Calcium chloride, dihydrate (CAS 10035-04-8)

Category 4

Components	Species	Test Results
Calcium chloride, dihydrate (CAS 10035-04-8)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 1000 mg/kg
<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.	
	Calcium chloride, dihydrate (CAS 10035-04-8)	Category 2A
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<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.

## 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 of 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 (see: Disposal instructions).
<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. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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.

**Reporting Exempted Substances**

Calcium chloride (CaCl<sub>2</sub>), dihydrate

### 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.

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

**Explosives Control Act**

Not regulated.

**Act on Prevention of Marine Pollution and Maritime Disaster**

Calcium chloride solution

Category: Z

**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

Dovetail Genomics, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.