

1. Chemical and company identification

Name of chemical (Product name) Hybridization Mix

Supplier's company name, address and phone number

Company Name TOMY Digital Bio
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 Taito-Ku, Tokyo 110-0008
 Japan
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Emergency phone number +1 760 476 3960
Access code 334943

Product code CP2-HYB-001

Recommended use of the chemical and restrictions on use

Intended use Molecular Biology Kit.

2. Hazards identification

GHS classification

Physical hazards The product is not classified according to GHS.
Health hazards Serious eye damage/eye irritation Category 1
Environmental hazards Short-term (acute) hazardous to the aquatic environment Category 2

GHS label elements

Pictograms



Signal words Danger

Hazard statement Causes serious eye damage. Toxic to aquatic life.

Precautionary statement

Prevention Avoid release to the environment. Wear eye protection/face protection.

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification None known.

Main symptoms and emergency overview

Main symptoms Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Emergency overview Causes serious eye damage. Dangerous for the environment if discharged into watercourses.

3. Composition/information on ingredients

Substance or mixture Mixture

Chemical name or generic name	CAS Number	Gazette notification		
		ENCS no.	ISHL no.	Concentration (%)
Sodium dodecyl sulfate	151-21-3	(2)-1679	(2)-1679	5
Ethylenediaminetetraacetate, di sodium salt	139-33-3	(2)-1265	(2)-1265, 2-(4)-116	0.1 - 3

Chemical formula C12-H26-O4-S.Na (151-21-3), C10H16N2O8 (139-33-3)

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
If swallowed	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
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	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media	Water fog. Foam. Powder. Carbon dioxide (CO ₂).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
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.

6. Accidental release measures

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	<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>
Prevention of secondary hazards	None known.

7. Handling and storage

Handling	
Technical measures (e.g. Local and general ventilation)	Provide adequate ventilation.
Safe handling advice	Do not get this material in contact with eyes. Avoid release to the environment. Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS.
Contact avoidance measures	Alkaline metals. Isocyanates. 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.
Storage	
Safe storage conditions	Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).
Safe packaging materials	Store in original tightly closed container.

8. Exposure controls/personal protection

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. Provide eyewash station.

Personal protective equipment

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.

9. Physical and chemical properties

Physical state	Liquid.
Form	Liquid.
Color	Clear. Colorless.
Odor	Odorless.
Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Combustibility	Not applicable.
Lower and upper explosion limit / flammability limit	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	6.5 - 8.5
Kinematic viscosity	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapor pressure	Not available.
Density and/or relative density	
Density	Not available.
Relative density	Not available.
Vapor density	Not available.
Particle characteristics	Not available.
Other information	
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	Alkaline metals. Isocyanates.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Acute toxicity	Not expected to be acutely toxic.	
Acute toxicity, dermal		
Sodium dodecyl sulfate (CAS 151-21-3)		Category 3
Acute toxicity, inhalation		
Ethylenediaminetetraacetate, di sodium salt (CAS 139-33-3)		Category 4
Acute toxicity, oral		
Sodium dodecyl sulfate (CAS 151-21-3)		Category 4

Components	Species	Test Results
Sodium dodecyl sulfate (CAS 151-21-3)		
Acute		
Oral		
LD50	Rat	1200 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Sodium dodecyl sulfate (CAS 151-21-3)		Category 2
Serious eye damage/eye irritation	Causes serious eye damage.	
Sodium dodecyl sulfate (CAS 151-21-3)		Category 1
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Sodium dodecyl sulfate (CAS 151-21-3)		Category 3 respiratory tract irritation
Specific target organ toxicity - repeated exposure	Not classified.	
Ethylenediaminetetraacetate, di sodium salt (CAS 139-33-3)		Category 2
Aspiration hazard	Not an aspiration hazard.	
Other information	The toxicological properties of this material have not been fully investigated.	

12. Ecological information

Ecotoxicological data			
Components		Species	Test Results
Ethylenediaminetetraacetate, di sodium salt (CAS 139-33-3)			
Aquatic			
Acute			
Fish	LC50	Guppy (Poecilia reticulata)	320 mg/l, 96 Hours
Sodium dodecyl sulfate (CAS 151-21-3)			
Aquatic			
Acute			
Algae	EC50	Scenedesmus subspicatus	36.5 mg/l, 72 Hours
Crustacea	EC50	Ceriodaphnia dubia	5.55 mg/l, 48 Hours
Fish	LC50	Lepomis macrochirus	4.5 mg/l, 96 Hours
Ecotoxicity	Toxic to aquatic life.		
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulation			
Bioaccumulative potential			
Octanol/water partition coefficient log Kow			
Sodium dodecyl sulfate (CAS 151-21-3)		1.6	
Mobility in soil	No data available for this product.		
Hazardous to the ozone layer	No data available.		
Other hazardous effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		

13. Disposal considerations

Residual waste	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).
Contaminated packaging	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.

Local disposal regulations

Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. 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

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)

SODIUM DODECAN-1-YL SULFATE

Law concerning Pollutant Release and Transfer Register

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

Not regulated.

Class 1 substances (substance name, ordinance number and content)

DODECYL SODIUM SULFATE Ordinance No. 275 5.0 % (Sodium dodecyl sulfate)

Class 2 substances (substance name, ordinance 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.

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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