1. Chemical and company identification

Name of chemical (Product name)
Dovetail™ Dual Index Primer Set #1 for Illumina® 8 Rx

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

Product code: DG-PRS-002

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: Health injuries are not known or expected under normal use.

3. Composition/information on ingredients

Substance or mixture: Mixture
Synonym(s):
DG-XG1 Unique Dual Index Primer Pair 1
DG-XG2 Unique Dual Index Primer Pair 2
DG-XG3 Unique Dual Index Primer Pair 3
DG-XG4 Unique Dual Index Primer Pair 4
DG-XG5 Unique Dual Index Primer Pair 5
DG-XG6 Unique Dual Index Primer Pair 6
DG-XG7 Unique Dual Index Primer Pair 7
DG-XG8 Unique Dual Index Primer Pair 8

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
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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
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.

Prevention of secondary hazards
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Handling
No specific recommendations.

Technical measures (e.g. Local and general ventilation)
Observe good industrial hygiene practices. Avoid prolonged exposure.

Safe handling advice
Strong oxidizing agents. For further information, please refer to section 10 of the SDS.

Contact avoidance 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.

Hygiene measures
Store away from incompatible materials (see Section 10 of the SDS).

Safe storage conditions
Store in original tightly closed container.

Safe packaging materials

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 easy access to water supply and eye wash facilities.

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
Colorless.

Odor
Mild.
Melting point/freezing point: Not available.

Boiling point, initial boiling point, and boiling range: Not applicable.

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: Not available.

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.
  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: Strong oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information

Acute toxicity: Not expected to be acutely toxic.

Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation: Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization
  Respiratory sensitization: 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.

  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.

Specific target organ toxicity - repeated exposure: Not classified.

Aspiration hazard: Not an aspiration hazard.

Other information: The toxicological properties of this material have not been fully investigated.
12. Ecological information

Ecotoxicity

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.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulation

No data available.

Mobility in soil

No data available for this product.

Hazardous to the ozone layer

Not hazardous to the ozone layer.

Bioaccumulation

No data available for this product.

Mobility in soil

Not hazardous to the ozone layer.

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 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. 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)

Not regulated.

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)

Not regulated.

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
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
- National Toxicology Program (NTP) Report on Carcinogens
- Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits
- Japan Chemical Industry Association (JCIA) GHS Guideline, June 2019
- JIS Z 7252:2014 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"
- JIS Z 7253:2012 Hazard communication of chemicals based on GHS - Labelling and Safety Data Sheet (SDS)

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