

Material Safety Data Sheet

SECTION 1 - PRODUCT INFORMATION

1.1 Product identifier

Product Name: Single Cell WGA Kit

Catalogue Number: YK001A/B

Product definition: Mixture

1.2 Use of the substance or preparation

The mixture is used as a base reactant for the preparation of a cell lysate reaction mixture in step 1 of the whole genome amplification procedure carried out with single cell WGA kit use permitted only in the laboratory.

SECTION 2 - Composition/Data on components

2.1 Chemical names

1. GLYCEROL (Glycerin)
2. Dimethyl Sulfoxide (DMSO)
3. Edetic Acid

SECTION 3-HAZARDOUS IDENTIFICATION

3.1 Emergency Overview:

May cause irritation to skin, eyes, and respiratory tract, may affect kidneys.

3.2 HMIS and NFPA Ratings: 0 – Minimal or None, 1 – Slight, 2 – Moderate, 3 – Serious, and 4 – Severe

1. GLYCEROL (Glycerin):

HMIS Rating: Health: 1, Flammability: 0, Reactivity: 1

NFPA Rating: Health: 1, Flammability: 0, Reactivity: 1

2. Dimethyl Sulfoxide (DMSO):

HMIS Rating: Health: 0, Flammability: 2, Reactivity: 1

NFPA Rating: Health: 0, Flammability: 2, Reactivity: 1

3. Edetic Acid:

HMIS Rating: Health: 0, Flammability: 2, Reactivity: 1

NFPA Rating: Health: 0, Flammability: 2, Reactivity: 1

SECTION 4-FIRST AID MEASURES

4.1 Description of first aid measures

EYE EXPOSURE: Flush eyes with copious amounts of water for at least 15 minutes. Get medical attention if irritation occurs.

INHALATION EXPOSURE: Remove to fresh air, If breathing is difficult, give oxygen. Call a physician.

ORAL EXPOSURE: Wash out mouth with water provided person is conscious. Call a physician.

DERMAL EXPOSURE: Wash with soap and water. Get medical attention if symptoms appear.

4.2 Most important symptoms and effects, both acute and delayed

EYE EXPOSURE :No known significant effects or critical hazards.

INHALATION EXPOSURE: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

ORAL EXPOSURE: No known significant effects or critical hazards.

DERMAL EXPOSURE: No known significant effects or critical hazards.

SECTION 5-FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Water spray

Carbon Dioxide

Dry chemical powder or appropriate foam

5.2 Special Firefighting Procedures:

Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes

5.3 Fire and Explosion Hazards:

Combustible liquid

Emits toxic fumes under fire conditions

SECTION 6-ACCIDENTAL RELEASE MEASURES

6.1 Person-related safety precautions

Ensure adequate ventilation

Avoid formation of dust

Wear protective clothing

6.2 Measures for environmental protection

Do not allow product to reach sewage system or any water course

Do not allow to enter sewers/ surface or ground water

6.3 Methods For Cleaning Up

Cover with dry lime, sand, or soda ash

Sweep up and shovel

Place in covered container for disposal

SECTION 7-HANDLING AND STORAGE

7.1 Handling

Information for safe handling: Keep receptacles tightly sealed

Information about protection against explosions and fires: No special measures required

7.2 Storage

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Not required

Further information about storage conditions: Keep receptacle tightly sealed

SECTION 8-EXPOSURE CONTROLS/PPE

8.1 Engineering Controls

Safety shower and eye wash

Mechanical exhaust

8.2 Personal Protective Equipment

Government approved respirator

8.3 Eye Protection:

Safety goggles

8.4 Hand Protection

Compatible resistant gloves

8.5 Respiratory Protection

None required

8.6 Hygiene Measure

General practice, wash (hands and skin) thoroughly after handling

Remove and wash contaminated clothing

SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES

9.1 General Information

Form: liquid

Color: clear or colorless

Odor: None or odorless

9.2 Change in condition

Melting point/Melting range: Undetermined

Boiling point/Boiling range: Undetermined

Flash point: 160°C

Auto igniting: Product is not selfigniting

Danger of explosion: Product does not present an explosion hazard

Density: Not determined

Solubility in / Miscibility with Water: Soluble

PH-value at 20°C (68°F): 8.0

SECTION 10-STABILITY AND REACTIVITY

- Stability: Stable under recommended storage conditions
- Materials to Avoid: Acid chlorides, Phosphorus halides, strong oxidizing agents, strong acids, strong reducing agents
- Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, sulfur dioxides
- Hazardous Polymerization: Hazardous Polymerization: Will not occur
- Dangerous reactions Reacts with water and acids
- Dangerous products of decomposition: Danger of toxic pyrolysis products

SECTION 11-TOXICOLOGICAL INFORMATION

11.1 Route of exposure

Skin contact: May cause skin irritaiton

Skin absorption: May be harmful

Eye contact: May cause eye irritation

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract

Ingestion: May be harmful if swallowed

Conditions aggravated by exposure: The toxicolgical properties have not been thoroughly investigated

Target Organs: Kidneys

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated

SECTION 12-ECOLOGICAL INFORMATION

12.1 General notes

Must not reach bodies of water or drainage ditch undiluted or unneutralized

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system

Danger to drinking water if even small quantities leak into the ground

SECTION 13-DISPOSAL CONSIDERATIONS

13.1Product

13.1.1 Methods of disposal:

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product

residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

13.1.2 Hazardous waste:

Within the present knowledge of the supplier, this product is not regarded as hazardous waste.

13.2 Packaging

13.2.1 Methods of disposal:

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible

13.2.2 Special precautions:

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14-TRANSPORT INFORMATION

This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO

SECTION 15-REGULATORY INFORMATION

- OSHA Hazards: None known.
- US Classification and Label Test
- US Statements: Caution. Avoid contact and inhalation. Target Organ (s): Kidneys.
- United States Regulatory Information:
- Sara Listed: No
- TSCA Inventory Item: Yes
- Canada Regulatory Information
- WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
- DSL: Yes
- NDSL: No
- EU Additional Classification
- S: 23-25

SECTION 16-OTHER INFORMATION

The information provided on the MSDS is furnished in good faith and based on our present knowledge. However, this MSDS shall not constitute a guarantee of any kind. Personnel handling this material must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of this material and the safety and health of employees and customers.

- Yikon Genomics Co. Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.
- Questions about the information found on this MSDS should be directed to info@yikongenomics.com