



MATERIAL SAFETY DATA SHEET

Glutathione (GSH) Colorimetric Detection kit

SECTION 1. IDENTIFICATION

Product name	Glutathione (GSH) Colorimetric Detection kit
Catalogue number	ZX-44100-96
Manufacturer or supplier's details	ZellBio GmbH . Krantorweg 48c . 13503 Berlin
Telephone	0049-30 81309085
Fax	0049-30 81309086
Email	support@zellx.de

SECTION 2. HAZARDS IDENTIFICATION



Regulation (EC) No. 1272/2008 [CLP/GHS]

Dimethyl sulfoxide

Hazard statements

Precautionary statements

Flammable, Category 4
Irritant, Class 2

Combustible liquid.
May be harmful if inhaled, absorbed through skin, swallowed.
May be irritating to eyes, respiratory system and skin.
Harmful to aquatic organisms.

Keep away from heat, open flames, hot surfaces, sparks.
Wash hands thoroughly after handling.
Wear protective gloves, clothing, and eye/face protection.

SECTION 3. FIRST AID MEASURES

General advice

If inhaled

Show this material safety data sheet to the doctor in attendance.

If inhaled, remove to fresh air. Seek medical attention if any respiratory symptoms develop.

In case of skin contact

Rinse with copious amounts of water and wash thoroughly with soap and water. If irritation or discomfort develops seek medical attention.

**In case of eye contact
If swallowed**

Rinse eyes with water as a precaution.

If swallowed, wash out mouth with water if person is conscious.

SECTION 4. INFORMATION ON INGREDIENTS

Components:

Oxidized Glutathione Standard (C020-200UL)
Colorimetric Detection Reagent (X041-1ML)
NADPH (X043-1ML)
Glutathione Reductase (X048-1ML)
Assay Buffer (X040-225ML)

Description:	Chemical Name	CAS No	Percent
X041-1ML, contains:	Dimethyl sulfoxide	67-68-5	100%

Additional components of the kit are non-hazardous or the specific chemical identity and/or exact percentage (concentration) of composition have been withheld as a trade secret.

ZX-44100-96

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable: Water spray. Carbon Dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures
Methods and materials for containment and cleaning up
Environmental precautions**

Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Keep in suitable, closed containers for disposal.
Discharge into drains should be avoided.

SECTION 7. HANDLING AND STORAGE

Handling

Avoid getting components of this kit on you or in you. Do not breathe vapor. Always wear appropriate protective clothing. Always wash hands and other exposed areas thoroughly after using this kit. Do not eat or drink while using this kit. Qualified and experienced professionals should only handle this kit.

Storage

Store according to the package insert instructions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

No special engineering controls are required when working with this kit. Use with adequate ventilation.

Protective Equipment

Safety glasses are recommended to prevent eye contact. Chemical resistant gloves, lab coat should be worn to prevent skin contact.

SECTION 9. STABILITY AND REACTIVITY

**Stability
Materials to Avoid
Incompatibilities**

This material is stable until the expiration date on the kit if stored as directed.
Heat, flames, sparks. Moisture.
Strong oxidizing or reducing agents, acid chlorides, phosphorus halides, strong acids.

SECTION 10. TOXICOLOGICAL INFORMATION

Route of Exposure

Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: May be harmful if inhaled. May be irritating to respiratory tract.
Ingestion: Harmful if swallowed.

Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 11. ECOLOGICAL INFORMATION

Toxicity

Fish: LC50 – Pimephales promelas (fathead minnow) – 34g/L, 96h
LC50 – Oncorhynchus mykiss (rainbow trout) – 35g/L, 96h
Aquatic invertebrates: ED50 – Daphnia magna (water flea) – 26 g/L, 48h
Algae: ED50 – Pseudokirchneriella subcapitata (green algae) – 17g/L, 72h

Persistence / degradability
Bioaccumulative potential:
Mobility in soil
Results of PBT/vPvB assessment
Other adverse effects
Stability in water

31% - According to results of test of biodegradability this product is not readily biodegradable (OECD Test Guideline 301D).
No data available.
No data available.
No data available.
No data available.
-0.12 – 1.2h at 30°C, Hydrolyses readily.

SECTION 12. DISPOSAL CONSIDERATIONS

Appropriate Method of Disposal of Substance

Dispose of waste materials, unused components and contaminated packaging in compliance with country, state, district and local regulations. If unsure of the applicable requirements, contact the authorities for information.

SECTION 13. TRANSPORT INFORMATION

U.S. and Canadian Transportation; DOT

Proper Shipping Name: Chemical Kits
UN Identification Number: 3316
Class and Description: 9, Miscellaneous
Packing Group: N/A
Hazard Label: Class 9

International Air Transportation (IATA)

Proper Shipping Name: Chemical Kits
UN Identification Number: 3316
Class and Description: 9, Miscellaneous
Packing Group: III Hazard
Label Class: 9

SECTION 14. REGULATORY INFORMATION

Product related information
Safety Statements
Risk Statements
U.S. Regulatory Information

The product is not subject to classification according to the sources of literature known to us.
Observe general safety regulations when handling chemicals.

Avoid release to the environment.
Harmful if swallowed.
Sara Listed: No

SECTION 15. OTHER INFORMATION

Department

R&D - ZELLX project - ZellBio GmbH

Last Revision

Disclaimer:

09.12.2019

For Research Use Only. Not for diagnostic, therapeutic, or other uses.

The information contained in this document is accurate to the best of our knowledge and is provided in good faith. This document is intended only as a guide to the appropriate precautionary handling of the materials contained in this kit by properly trained personnel using this kit. Final determination or suitability of any materials is the sole responsibility of the user. ZELLX® shall not be held liable for any damage resulting from use or handling of this product.

Other Information

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