Safety Data Sheet

Revision Date: 29 September 2015

Product Name: DetectX® Thiol Fluorescent Detection Kit

Section 1: Identification

Product Name: DetectX® Thiol Fluorescent Detection Kit

Also known as: Catalog Number K005-F1

Manufacturer / Supplier
Arbor Assays
1514 Eisenhower Place
Ann Arbor, MI 48108-3284 Telephone 734-677-1774 (U.S.)
U.S.A. Fax 734-677-6860 (U.S.)

Recommended Use For Research Use Only

Section 2: Hazard(s) Identification

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

Dimethyl sulfoxide: Flammable, Category 4
Irritant, Class 2

Hazard statements: Combustible liquid.
May be harmful if inhaled, absorbed through skin, swallowed.
May be irritating to eyes, respiratory system and skin.
Harmful to aquatic organisms.
May cause long-term adverse effects in aquatic environment.

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

Section 3: Information on Ingredients

Components: N-Acetylcysteine Standard (C013-220UL)
ThioStar® Detection Reagent (2 each, C012-1EA)
Dry DMSO (X022-4ML)
Assay Buffer Concentrate (X021-60ML)

Description: DMSO, X022-4ML, contains:

Chemical Name	CAS No.	Percent
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.

Section 4: First-Aid Measures

Inhalation	If inhaled, remove to fresh air. Seek medical attention if any respiratory symptoms develop.
Skin Contact	Rinse with copious amounts of water and wash thoroughly with soap and water. If irritation or discomfort develops seek medical attention.
Eye Contact	Rinse eyes with water as a precaution.
Ingestion	If swallowed, wash out mouth with water if person is conscious.

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

Cleanup Procedures	Wear appropriate protective clothing. Avoid breathing vapors, mist or gas. Ventilate area. Contain spill to prevent migration. Wipe up spill, place in sealed container for disposal. Wash area of spill with soap and water.
Waste Disposal	Dispose of in accordance with federal, state, and local regulations.

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 and a lab coat should be worn to prevent skin contact.

Section 9: Physical and Chemical Properties

Characteristic	Dry DMSO, X022-4ML (Dimethyl sulfoxide, 100%)
Appearance	Clear, colorless liquid
Odor	Slight
Boiling Point	189°C (372°F) at 1,013 hPa (760 mmHg)
Melting Point	18.4°C (65.1°F)
Flash Point	87°C (189°F) – closed cup
Ignition temperature	301°C (574°F)
Density	1.1 g/cm3
Vapor Pressure	0.55 hPa (0.41 mmHg) at 20°C (68°F)
Solubility in Water	Complete
pH	N/A

Section 10: Stability and Reactivity

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

Section 11: 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 12: 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:	31% - According to results of test of biodegradability this product is not readily biodegradable (OECD Test Guidline 301D).
Bioaccumulative potential:	No data available.
Mobility in soil:	No data available.
Results of PBT/vPvB assessment:	No data available.
Other adverse effects:	No data available.
Stability in water:	-0.12 – 1.2h at 30°C, Hydrolyses readily.

Section 13: Disposal Considerations

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 14: Transport Information

U.S. and Canadian Transportation; DOT

Proper Shipping Name	Chemical Kits
UN Identification Number	1789
Class and Description	8, Miscellaneous
Packing Group	N/A
Hazard Label	Class 8

International Air Transportation (IATA)

Proper Shipping Name	Chemical Kits
UN Identification Number	1789
Class and Description	8, Miscellaneous
Packing Group	III
Hazard Label	Class 8

Section 15: Regulatory Information

Product related information

The product is not subject to classification according to the sources of literature known to us.

Observe general safety regulations when handling chemicals.

Safety Statements

Avoid release to the environment.

Risk Statements

Harmful if swallowed.

U.S. Regulatory Information

Sara Listed: No.

Section 16: Other Information

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

Further Information: 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. Arbor Assays shall not be held liable for any damage resulting from use or handling of this product.