

SAFETY DATA SHEET

Date: February 16, 2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CF® Dye Secondary Antibody (Liquid Format)
Catalog Number: See product information sheet
Unit Size: 50 uL, 100 uL, 250 uL, 500 uL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: <http://www.biotium.com>

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS classification

Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
GHS hazard pictogram None

WHMIS classification None

NFPA Rating

Health hazard: 1
Fire: 1
Reactivity Hazard: 0

Classification according to Regulation (EC) No 1272/2008[CLP] None

Labeling according to Regulation (EC) No 1272/2008[CLP]

Hazard pictogram None
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Weight %	Classification
Glycerol	56-81-5	200-289-5	50%	N/A

4. FIRST-AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

5. FIREFIGHTING MEASURES
Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES
Personal precautions

Avoid breathing vapors, mist, or gas. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE
Precautions for safe handling

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store at -20°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Substance Glycerol

CAS no. 56-81-5

Country	Australia	Belgium	Canada - Ontario	Canada - Québec	Finland	France
Limit value, 8hours	10 mg/m ³ (1)	10 mg/m ³	10 mg/m ³	10 mg/m ³	20 mg/m ³	10 mg/m ³
Limit value, short term	--	--	--	--	--	--

Country	Germany AGS)	Germany (DFG)	Ireland	New Zealand	Poland	Singapore
Limit value, 8hours	200 mg/m ³ (1)	200 mg/m ³ (1)	10 mg/m ³	10 mg/m ³ (1)	10 mg/m ³	10 mg/m ³
Limit value, short term	400 mg/m ³ (1)(2)	400 mg/m ³ (1)(2)	--	--	--	--

Country	South Korea	Spain	Switzerland	USA - OSHA	United Kingdom
Limit value, 8hours	10 mg/m ³	10 mg/m ³	50 mg/m ³ inhalable aerosol	15 mg/m ³ (1) 5 mg/m ³ (2)	10 mg/m ³
Limit value, short term	--	--	100 mg/m ³ inhalable aerosol	--	--

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

Germany (AGS) (1) Inhalable fraction (2) 15 minutes average value

German (DFG) (1) Inhalable fraction (2) 15 minutes average value

New Zealand (1) The value for inhalable dust containing no asbestos and less than 1% free silica.

USA-OSHA (1) Inhalable fraction (2) Respirable fraction

Personal protective equipment

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	CF® Dye Secondary Antibody (Liquid Format)
Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	7.4
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Soluble
Partition coefficient:n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50	Rat - 27,200 mg/kg
Inhalation LC50	None
Dermal LD50	Rabbit - > 10,000 mg/kg
Other information on acute toxicity	No data available
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation - 24 h
Serious eye damage/eye irritation	Eyes - Rabbit Result: No eye irritation

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

Repeated dose toxicity - Rat - male - Oral - NOAEL (No observed adverse effect level) - > 1,600 mg/kg

Remarks: (ECHA)

Repeated dose toxicity - Rat - male and female - Inhalation

Remarks: (ECHA)

Repeated dose toxicity - Rabbit - Dermal

RTECS: MA8050000

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

Kidney - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish static test LC50 - Oncorhynchus mykiss (rainbow trout) - 54,000 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates
 Remarks: No data available (glycerine)

Toxicity to algae
 Remarks: No data available (glycerine)

Persistence and degradability Biodegradability aerobic - Exposure time 2 d
 Result: 90 % - Readily biodegradable.

Bioaccumulative potential No information available

Mobility in soil No information available

Results of PBT and vPvB assessment No information available
Other adverse effects No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local, state, or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG Not dangerous goods during transportation
UN number None
UN proper shipping name None
Transport hazard class None
Packing group None
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None
Special precaution for user None

15. REGULATION INFORMATION

US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312: No chemicals were found

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.
Version no. 6
Revision date (Initials) 2/16/23 (ET)
Reason for revision Update to new document template.

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