

SAFETY DATA SHEET

1. Identification	
1.1. Product Name	Tag-it Violet™ Proliferation and Cell Tracking Dye
Component	DMSO
Catalog No.	2725505
1.2. Recommended Use	Research use only
1.3. Supplier Address Telephone, fax, email	SONY BIOTECHNOLOGY INC. 1730 North First Street, San Jose, CA 95112 U.S.A. Voice: +1 800-275-5963, FAX: +1 408-352-4130, SBTcustomerservice@sonybiotechnology.com
1.4. e-mail address of person responsible for this SDS	SBTcustomerservice@sonybiotechnology.com
1.5. Emergency telephone number	In case of a chemical emergency, spill, fire, or exposure US: +1 800-275-5963 (6:00AM – 5:30PM PT, M-F)
2. Hazards Identification	
2.1. GHS Hazard Classification	Flammable liquids (Category 4)
OSHA Hazards	Combustible Liquid, Target Organ Effect
Target Organs	Eyes, Skin
2.2. GHS Label elements, including precautionary statements	
Pictogram	None
Signal word	Warning
Hazard statements H227	Combustible liquid
2.3. Precautionary statement (Prevention)	
P210	Keep away from flames and hot surfaces. –No smoking.
P280	Wear protective gloves/eye protection/face protection.
P370+P378	In case of fire: Use media such as alcohol-resistant foam, dry chemical, water, or carbon dioxide for extinction. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local regulations.
2.4. Potential Health Effects	
Inhalation	May be harmful if inhaled.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

Aggravated Medical Condition

Avoid contact with DMSO solutions containing toxic materials with Condition unknown toxicological properties. Dimethyl sulfoxide is readily absorbed through skin and may carry such materials into the body.

3. Composition/Information on Ingredients

3.1. Component	Dimethyl Sulfoxide (DMSO)
3.2. CAS	67-68-5
3.3. EINECS	200-664-3
3.4. Concentration	>95% (v/v)

4. First Aid Measures

4.1. Description of necessary first aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
After inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact	Wash off with soap and plenty of water. Consult a physician.
After eye contact	Flush eyes with water as a precaution.
After swallowing	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire-Fighting Measures

Flammable in presence of a source of ignition when the temperature is above the flash point. Keep away from heat, sparks, open flames and hot surfaces. No smoking.

5.1. Suitable extinguishing agents	For small (incipient) fires, use media such as alcohol foam, dry chemical, or carbon dioxide. For fire fighters, for large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water..
5.2. Special hazards caused by the material, its products of combustion or resulting gases	Containers can burst due to heat and pressure. Move container from fire area if it is safe to do so.
5.3. Special protective equipment and precautions for fire-fighters	Wear protective clothing and self-contained breathing apparatus. Use water to cool unopened containers.
5.4. Hazardous combustion products	Carbon oxides, Sulfur oxides.

6. Accidental Release Measures

6.1. Person-related safety precautions	Avoid breathing vapours, mist or gas. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapors can accumulate in low areas.
6.2. Environment precautions	Prevent entry into waterways, drains, soil, and sewers. Prevent further leakage or spillage if safe to do so..
6.3. Measures for cleaning/collecting	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

- 6.4. Additional information See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. Handling and Storage

- 7.1. Information for safe handling Avoid inhalation of vapor or mist. Keep away from sources of ignition (heat, sparks, open flames, hot surface). No smoking. Take measures to prevent the buildup of electrostatic charge.
- 7.2. Conditions for safe storage Keep container tightly closed in a dry and well-ventilated place. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure Controls / Personal Protection

8.1. Exposure Limits

Dimethyl Sulfoxide	
Workplace Environmental Exposure Level	TWA 250 ppm

8.2. Exposure Controls

Engineering Controls	Use only with adequate (local exhaust) ventilation or inside a fume hood.
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8.3. Personal protective equipment

Hand protection	Chemical resistant gloves.
Eye protection	Laboratory safety goggles.
Body protection	Protective work clothing.

9. Physical and Chemical Properties

Appearance	Liquid, Colorless
Odor	Odorless
Odor threshold	Not available.
pH	No Data Available
Melting point/freezing point	18.45°C
Boiling point	189°C
Flash point	87°C
Evaporation rate	No Data Available
Flammability	No Data Available
Upper explosion limit	No Data Available
Lower explosion limit	No Data Available
Vapor pressure	0.42 mmHg at 20°C
Vapor density	2.7 g/l at 20°C
Relative density	No Data Available
Solubility	Difficult to mix
Partition coefficient	No Data Available
Auto-ignition temperature	270°C
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive Properties	No Data Available
Oxidizing Properties	No Data Available

10. Stability and Reactivity

- 10.1. Reactivity May be reactive with water.
- 10.2. Chemical stability Stable when stored under normal ambient and anticipated storage and handling conditions of temperature and pressure.
- 10.3. Possibility of hazardous reactions No data available.

10.4. Conditions to avoid	Avoid exposure to high temperatures (heat, flames, sparks) or direct sunlight.
10.5. Incompatible materials	Store separately from alkalis, reducing agents, flammable, metals, powdered metals, chlorates, cyanides, nitrates, halides, carbides, fulminates, hydrogen peroxide, combustible organic materials, acid chlorides, phosphorus halides, strong acids, strong oxidizing agents, strong reducing agents, any strong oxidizing or reducing reagent.
10.6. Hazardous decomposition products	Sulphur Oxides, carbon oxides.
11. Toxicological Information	
11.1. Information on toxicological effects	
Routes of Entry	Ingestion, inhalation, skin and eye contact.
Acute Toxicity	Oral LD50 14,500 mg/kg (rat) LC50 (rat) 4 hours 40,250 ppm LD50 dermal (rabbit) >5,000 mg/kg
Skin Corrosion/Irritation	May cause skin irritation. No rabbit skin irritation with 4 hours.
Serious eye damage/irritation	May cause irritation
Respiratory or skin sensitization	Harmful to mucous membranes and upper respiratory tract
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available
11.2. Potential health effects	
Inhalation	May be harmful if inhaled.
Skin	May be harmful if absorbed through skin. May cause skin irritation..
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.
Aggravated Medical Condition	Avoid contact with DMSO solutions containing toxic materials with Condition unknown toxicological properties. Dimethyl sulfoxide is readily absorbed through skin and may carry such materials into the body.
12. Ecological Information	
12.1. Environmental Toxicity	No data available
12.2. Aquatic Toxicity	DMSO LC50 toxicity to fish, (rainbow trout) Oncorhynchus mykiss: 35,000 mg/l -96.0 h
12.3. Persistence and degradability	No data available

12.4. Bioaccumulative potential	No data available
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12.5. Mobility in soil	No data available
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12.4. Results of PBT and vPvT assessment	No data available
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13. Disposal Considerations

Disposal methods

Minimize waste as much as possible. Provide any solution that cannot be recycled or used to a licensed disposal company. Alternatively, dissolve in or mix with a combustible solvent, and burn in a chemical incinerator equipped with an after burner and scrubber. Disposal must be made according to state and federal regulations.

14. Transport Information

DOT (Domestic)

NA1993, Combustible liquid, n.o.s. Packing Group: III
 Proper shipping name: Combustible liquid, n.o.s. (Dimethyl sulfoxide)
 Marine pollutant: No
 Poison Inhalation Hazard: No

IMDG

Not regulated

IATA

Not regulated

ADR

Not regulated

ADN

Not regulated

RID

Not regulated

15. Regulatory Information

OSHA Hazards

Combustible Liquid, Target Organ Effect

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Dimethyl sulfoxide

CAS-No.

67-68-5

Revision Date

2007-03-01

New Jersey Right To Know Components

Dimethyl sulfoxide

CAS-No.

67-68-5

Revision Date

2007-03-01

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other Information

Revision Date	September 23, 2013
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Only trained personnel should use this material.

This SDS was created in good faith based on our current knowledge at the time of creation and revision, but no warranty is made on the information, hazards, and toxicity data described. Prior to use, be sure to examine the latest information, rules, laws, and regulations of your country or region concerning hazards and harmful effects as well as regarding equipment to be used, and accord the highest priority to them.

The precautions described in this document assume normal handling of the product. When handling the product in an unconventional manner, be sure to take appropriate safety measures according the situation and take sufficient precautions.

All chemical products should be handled assuming the presence of "unknown hazards and harmful effects" and with the knowledge that such hazards will vary greatly depending on the usage environment, handling method, and conditions and period of storage. All handling of the product, including use, unpacking, storage, and disposal, should be performed only by specialists with professional knowledge and experience or under close supervision of such qualified specialists.

It is the sole responsibility of the user to ensure and provide proper safe use conditions.

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