

Safety Data Sheet

Version 1.3 - Revision Date 10/31/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ghost Dye™ Violet 450
 Catalog Number: 13-0863
 Brand: Tonbo Biosciences
 Supplier: Tonbo Biosciences
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 USA
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 Preparation Information: Tonbo Biosciences Product Safety
 +1 (855) 848-6626 toll-free

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

This product contains no hazardous constituents or the concentration of all chemical constituents are below the regulatory thresholds under OSHA regulations.

This product contains no hazardous constituents or the concentration of all chemical constituents are below the regulatory thresholds according to the Globally Harmonized System (GHS)

HMIS Classification

Health Hazard: 1
 Chronic Health Hazard: 0
 Flammability: 2
 Physical Hazards: 1

NFPA Rating

Health Hazard: 1
 Fire: 1
 Reactivity Hazard: 0

Potential Health Effects

Inhalation

Potentially causes respiratory tract irritation.

Skin

Irritating to skin. Components may be absorbed into the body through the skin.

Eyes
Ingestion

Potentially irritating to eyes.
Potentially toxic if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Dimethylsulfoxide CAS number 67-68-5

4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen and consult a physician.

In case of skin contact

Wash off immediately with soap and plenty of water, remove any contaminated clothing, and consult a physician.

In case of eye contact

Flush eyes with water for at least 15 minutes and consult a physician.

If swallowed

Rinse mouth with water and consult a physician immediately.

5. FIREFIGHTING MEASURES

Conditions of flammability

Flammable liquid.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus and protective clothing for fire fighting.

Hazardous combustion products

Carbon oxides, nitrogen oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas.

Environmental precautions

Avoid spillage or leakage. Prevent product from entering drains or sewer systems.

Methods and materials for containment and cleaning up

Use a damp mop or sponge to clean up spill and surrounding area. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Conditions for safe storage

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

Recommended storage temperature: -20 °C

Special requirement: Light sensitive - prolonged exposure to light could result in decreased product performance.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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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.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice including washing thoroughly after handling and washing contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
Color	no data available

Safety data

pH	no data available
Melting point/freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Prolonged light exposure may affect product performance or quality.

Materials to avoid

Acid chlorides, strong acids, strong oxidizing agents, reducing agents.

Hazardous decomposition products

Carbon oxides, sulphur oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

Inhalation LC50

No data available

Dermal LD50

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin irritant. Components may be absorbed into the body through the skin.

Serious eye damage/eye irritation

Eye irritant.

Respiratory or skin sensitization

Potentially harmful in contact with skin and may be harmful by inhalation.

Germ cell mutagenicity

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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.
- 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

May impair fertility and may cause harm to unborn child.

Teratogenicity

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 | Potentially harmful if inhaled. May cause respiratory tract irritation. |
| Ingestion | Potentially toxic if swallowed. |
| Skin | Potentially harmful if absorbed through skin. May cause skin irritation. |
| Eyes | Irritant to eyes. |

Signs and Symptoms of Exposure

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

Synergistic effects

No data available

Additional Information

RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of product in accordance with federal, state and local regulations.

Contaminated packaging

Dispose of as unused product in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

SARA 302 Components

No components in the material are subject to 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

No SARA Hazards

Reportable Quantity lowest RQ > 999999 lbs
 lowest RQ > 999999 lbs

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Dimethylsulfoxide	67-68-5	2007-07-01

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Dimethylsulfoxide	67-68-5	

New Jersey Right To Know Components

	CAS-No.	Revision Date
Dimethylsulfoxide	67-68-5	

California Prop. 65 Components

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

16. OTHER INFORMATION

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Tonbo Biosciences and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.tonbobio.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.