



Material Safety Data Sheet Date Updated: 9/08/2022

### 1. Product and Company Information

**Product Name:** Trypan Blue  
**SKU:** OS-011  
**CAS-No:** 72-57-1  
**Company:** Obatala Sciences, Inc  
2000 Lakeshore Dr., #4020  
New Orleans, LA 70148  
(504) 300-0266

### 2. Composition/Information on Ingredients

Formula	Molecular Weight (g/mol)	CAS-No.	EC No.	Index No.
C34H24N6O14S4Na4	960.82	72-57-1	200-786-7	611-024-00-1

### 3. Hazards Identification

- a. Classification of Substance or Mixture (GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
  - i. Carcinogenicity (Category 1B), H350
- b. GHS Label Elements (Including Precautions)
  - i. Pictogram:
  - ii. Signal Word: Danger
  - iii. Hazard Statement(s): H350, May cause cancer
  - iv. Precaution Statement(s):
    1. P201: Obtain special instructions before use
    2. P202: Do not handle until all safety precautions have been read and understood
    3. P280: Wear protective gloves, protective clothing, eye protection, and face protection
    4. P308 & P313: If exposed or concerned, seek medical advice
    5. P405: Store in secure location
    6. P501: Dispose of contents and container at an approved waste disposal facility
- c. Hazards Not Classified (HNOC) or Covered by GHS: None

### 4. First Aid Measures

- a. Description of First-Aid Measures
  - i. General: Show this material safety data sheet to attending physician
  - ii. After swallowing: Immediately drink at most 2 glasses of water. Consult physician
  - iii. After skin contact: In case of skin contact, take off all contaminated clothes immediately. Rinse skin in water or shower. Consult physician.

- iv. After eye contact: Rinse eyes with plenty of water. Call ophthalmologist. Remove contact lenses.
- b. Important Symptoms and Effects (Acute and Delayed): Most important known symptoms and effects are described in Section 3 and/or in Section 11
- c. Indication of Any Immediate Medical Attention or Special Treatment Needed

## 5. Fire Fighting Measures

- a. Extinguishing Methods: Water foam carbon dioxide (CO<sub>2</sub>) dry powder
- b. Special Hazards from Substance or Mixture:
  - i. Carbon oxides
  - ii. Nitrogen oxides
  - iii. Sulfur oxides
  - iv. Sodium oxides
  - v. Combustible
  - vi. Fire may cause evolution of sulfur oxides, nitrous gases, nitrogen oxides
  - vii. Development of hazardous combustion gases or vapors possible in the event of a fire
- c. Advice for Firefighters: Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
- d. Additional Information: Suppress gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or ground water system.

## 6. Accidental Release

- a. Personal Precautions, PPE, and Emergency Procedures
  - i. Avoid generation and inhalation of dusts in all circumstances.
  - ii. Avoid contact with substance.
  - iii. Ensure adequate ventilation.
  - iv. Evacuate the danger area, observe emergency procedures, and consult an expert.
- b. Environmental Precautions: Do not allow product to enter drains.
- c. Methods and Materials Required for Containment and Clean Up
  - i. Cover drains.
  - ii. Collect, bind, and pump off spills.
  - iii. Take up carefully.
  - iv. Dispose properly.
  - v. Clean up affected area.
  - vi. Avoid dust generation.
- d. Disposal: Refer to Section 13

## 7. Handling and Storage

- a. Precautions for Safe Handling
  - i. Safe Handling Procedure: Work under ventilated hood. Do not inhale substance or mixture.
  - ii. Hygiene Procedure: Immediately change contaminated clothing. Apply preventative skin protection. Wash hands and face after working with substance.
- b. Conditions Required for Safe Storage
  - i. Keep vessel tightly closed.
  - ii. Store in dry, well-ventilated space.

- iii. Store in secure area.
- iv. Store at 4°C or ambient temperature.
- v. Storage class: TRGS 510: 6.C, combustible, acute toxic category 3, toxic compounds, or compounds causing chronic effects

## **8. Exposure Controls/Personal Protective Equipment**

- a. Control Parameters: Contains no substances with occupational exposure limit values
- b. Exposure Controls
  - i. Engineering Controls: Immediately change contaminated clothing. Apply preventative skin protection. Wash hands and face after working with substance.
  - ii. PPE
    - 1. Eye/Face Protection: Use equipment for eye protection tested and approved under appropriate government standards. Use safety glasses.
    - 2. Skin Protection: Nitrile gloves
    - 3. Body Protection: Protective clothing
    - 4. Respiratory Protection: Required when dusts are generated
    - 5. Control of Environmental Exposure: Do not let product enter drains.

## **9. Physical and Chemical Properties**

- a. Appearance
  - i. Form: Liquid
  - ii. Color: Dark Blue
- b. Odor: No data available
- c. Odor Threshold: No data available
- d. pH: No data available
- e. Melting/Freezing Point: No data available
- f. Initial Boiling Point and Boiling Range: No data available
- g. Flash Point: No data available
- h. Evaporation Rate: No data available
- i. Flammability: No data available
- j. Upper/Lower Flammability or Explosive Limits: No data available
- k. Vapor Pressure: No data available
- l. Vapor Density: No data available
- m. Density: No data available
- n. Water Solubility: No data available
- o. Viscosity: No data available
- p. Explosive Properties: No data available
- q. Oxidizing Properties: No data available

## **10. Stability and Reactivity**

- a. Reactivity: None
- b. Chemical Stability: Stable under ambient conditions
- c. Possibility of Hazardous Reactions: Violent reactions possible with acids.  
Caution: Contact with nitrites, nitrates, and nitrous acid could result in liberation of nitrosamines.
- d. Conditions to Avoid: None
- e. Incompatible Materials: No data available

- f. Hazardous Decomposition Products: Refer to Section 5

## 11. Toxicological Information

- a. Information on Toxicological Effects
  - i. Acute Toxicity
    - 1. LD50 Oral: 6,200 mg/kg in rats
    - 2. Inhalation: No data available
    - 3. Dermal: No data available
  - ii. Skin Corrosion/Irritation: No data available
  - iii. Serious Eye Damage/Eye Irritation: No data available
  - iv. Respiratory or Skin Sensitization: No data available
  - v. Carcinogenicity: Presumed to have carcinogenic potential in humans
    - 1. IARC: Group 2B, possibly carcinogenic to humans
    - 2. NTP: No ingredient in this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
    - 3. OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
  - vi. Reproductive Toxicity: Experiments have shown reproductive toxicity effects on laboratory animals.
  - vii. Specific Target Organ Toxicity for Single Exposure: No data available
  - viii. Specific Target Organ Toxicity for Repeated Exposure: No data available
  - ix. Aspiration Hazard: No data available
  - x. Additional Information: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. Ecological Information

- a. Toxicity: Toxicity to fish, LC50-Oryzias latipes >1,000 mg/L at 48 h
- b. Persistence and Degradability: No data available
- c. Bio accumulative Potential: No data available
- d. Mobility in Soil: No data available
- e. Results of PBT and vPvB Assessment: Not required/not conducted
- f. Other Adverse Effects: No data available

## 13. Disposal

- a. Waste Treatment Methods: Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## 14. Transportation

- a. DOT (US)
  - i. UN Number: 3077, Class: 9, Packing Group: III
  - ii. Proper Shipping Name: Environmentally hazardous substance, liquid
  - iii. Reportable Quantity (RQ): 10 lbs
  - iv. Poison Inhalation Hazard: No
- b. IMDG: No dangerous goods
- c. IATA: No dangerous goods

### 15. Regulatory Information

Regulatory Name	CAS-No.	EPCRA 302 EHS TPQ	EPCRA 304 EHS RQ	CERCLA RQ	EPCRA 313 TRI	RCRA Code	CAA 112 ® RMP TQ
Trypan Blue	72-57-1	X	X	10 lbs	313	U236	X

### 16. Other Information

**Disclaimer:** All products are provided solely for research purposes and have not been produced in accordance with current Good Manufacturing Practices. Thus, any use of Obatala Sciences products for clinical purposes and/or other administration to human subjects is unsafe, unwarranted, and unauthorized by the vendor.

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Obatala Sciences shall have no liability for any direct, indirect, consequential or incidental damages arising out of the use, the results of use, the inability to use, the handling or contact with this product.