

Material Safety Data Sheet

1. Product and Company Identification

Product Name: i-BRITE Plus Catalog #: SF40000-10

Company: Neuromics, Inc., 5325 West 74th St., Suite 8, Edina, MN 55439, Toll free: 866-350-1500, Int'l phone: 952-374-6161, Fax: 612-677-3976

2. Hazards Identification

May cause sensitization when contacts unprotected skin and eyes.

3. Composition/Information of ingredients

| <i>p</i> -Phenylenediamine | | | | | | |
|----------------------------|-----------|------------------|--|---------------|--|--|
| Formula | EC# | Molecular Weight | Classification | Concentration | | |
| C H N 6 8 2 | 203-404-7 | 108,14 | T, N, R50/53 - R23/24/25 - R36 - R43 | <1% | | |

| Glycerol | | | | | | |
|--|-----------|------------------|----------------|---------------|--|--|
| Formula | EC# | Molecular Weight | Classification | Concentration | | |
| C ₃ H ₈ O ₃ | 200-289-5 | 92,1 | N/A | 45% | | |

4. First Aid Measures

In case of skin contact, rinse with soap and clean water.

In case of eye contact, wash eyes with clean water.

In case it is swallowed, rinse mouth with plenty of clean water,

5. Fire Fighting Meaures

<u>Suitable extinguishing media:</u> Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. <u>Special protective equipment for fire-fighters:</u> Wear self contained breathing apparatus for fire fighting if necessary.

6. Accidental Release Measures

<u>Personal precautions:</u> Avoid breathing vapors, mist or gas. <u>Environmental precautions:</u> Do not let product enter drains.

Methods for cleaning up: Keep in suitable, closed containers for disposal.

7. Handling and Storage

Handling: Normal measures for preventive fire protection.

Storage temperature: store tightly closed vial in a freezer between -20°C -80°C



8. Exposure Control/Personal Protection

Personal protective equipment:

Respiratory protection: Respiratory protection is not required.

Protective gloves: avoid skin contact by wearing gloves.

Skin protection: avoid contact with skin.

Eye protection: avoid contact with eyes by wearing safety glasses.

Hygiene measures: follow general industrial hygiene practice.

9. Physical and Chemical Properties

Color: clear with slight yellow-bluish tint

Form: liquid solution

Odor: odorless

Safety Data: pH 9.2-9.5
Melting point: 20 °C
Boiling point: no data
Flash point: no data
Freezing point: no data
Water solubility: soluble

10. Stability and Reactivity

Stability: stable under recommended storage conditions.

Conditions to avoid: keep from heat and open flame, and exposure to direct light.

Materials to avoid: strong bases and strong oxidizing agents.

<u>Hazardous decomposition products:</u> products formed under fire conditions including Carbon and Nitrogen oxides.

11. Toxicological Information

Results of components' toxicity

p-Phenylenediamine exhibits acute toxicity: rat (oral) LD50 – 80 mg/kg; glycerol – 12,600 mg/kg

Components' irritation and corrosion

p-Phenylenediamine: rabbit skin – mild irritation – 24 h.

Glycerol: rabbit skin – mild irritation – 24 h; rabbit eye - mild irritation – 24 h.

Components' sensitization

p-Phenylenediamine - may cause allergic skin reaction.

Glycerol - no data available.

Components' chronic exposure

p-Phenylenediamine: Carcinogenicity - rat - Subcutaneous

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application. This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: Group 3 - Not classifiable as to carcinogenicity to humans (p-Phenylenediamine)

Glycerol: 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.

Signs and symptoms of exposure to components

p-Phenylenediamine: Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

Glycerol: prolonged or repeated exposure can cause nausea, headache, vomiting.



Potential Health Effects

Inhalation: may be harmful if inhaled. May cause respiratory tract irritation. Skin: may be harmful if absorbed through skin and may cause skin irritation.

Eyes: may cause eye irritation.

Ingestion: may be harmful if swallowed.

Target Organs: liver, kidney.

12. Ecological Information

Elimination information

Biodegradability: biotic/aerobic <u>Ecotoxicity effects</u>: no data available

Further information on ecology: no data available

13. Disposal Considerations

Product: observe all federal, state, and local environmental regulations. Contaminated packaging: dispose of as unused product.

14. Transport Information

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

15. Regulatory Information

The product does not need to be labeled in accordance with EC directives or respective national laws.

Disclaimer

Copies of this data sheet can be made for internal use only. Information provided in this data sheet is believed to be accurate but is not claimed to be all inclusive and shall be used only as a guide, and does not guarantee the properties of the product. The information provided in this data sheet utilizes the present state of our knowledge and is applicable to described product with regard to appropriate safety precautions. Neuromics, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.