

## SAFETY DATA SHEET

HELENA LABORATORIES  
1530 Lindbergh Dr.  
Beaumont, TX 77707  
USA Toll Free 800-231-5663

DATE PREPARED: 2/6/2024

REVISION: 3

**1. IDENTIFICATION**

Product Number: 5041

Product identifier used on the label: o-Tolidine

Other means of identification:

Component Name	Component Number
o-Tolidine	5041

Recommended use of the chemical and restrictions in use: For In-Vitro Diagnostic use.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Helena Laboratories  
1530 Lindbergh Dr.  
Beaumont, TX 77707  
Tel: (409) 842-3714  
USE Toll Free 800-231-5663

Emergency phone number:

(409) 842-3714

**2. HAZARD IDENTIFICATION**

Classification of the chemical:

Component Name	GHS Classification	Hazard Statement
o-Tolidine	Acute Toxicity, Oral (Category 4) Cancirogenicity (Category 1B)	Harmful if swallowed May cause cancer

Label elements:

Signal word: Danger

**Precautionary statements:** Harmful if swallowed. May cause cancer.

Wear protective gloves/protective clothing/eye and face protection.

---

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	Chemical Name	CAS #	Concentration
o-Tolidine	3,3'-Dimethlybenzidine	119-93-7	95%

---

### 4. FIRST AID MEASURES

**Description of first aid measures:**

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Flush eyes with plenty of water. Obtain medical attention.

**Ingestion:** Do not induce vomiting. Consult a physician.

---

### 5. FIREFIGHTING MEASURES

**Extinguishing media:** Water spray, dry chemical, carbon dioxide or chemical foam.

**Special hazards arising from the substance or mixture:** Carbon oxide, nitrogen oxides.

**Special protective equipment and precautions for firefighters:** Wear proper protective equipment and self contained breathing apparatus for firefighting if necessary.

---

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Wear protective equipment.

**Methods and materials for containment and cleaning up:** Pick up and transfer to container for proper disposal. Do not let product enter the drains.

---

### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Wear personal protective equipment, avoid contact with skin and eyes.

**Conditions for safe storage, including any incompatibilities:** Store as per specified instructions.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limits (ACGIH TLV & OSHA PEL):

Chemical Name	ACGIH TLV	OSHA PEL
3,3'-Dimethylbenzidine	Skin	None listed

### Exposure controls:

**Respiratory protection:** NIOSH/MSHA approved.

**Skin protection:** Wear appropriate protective gloves and suitable protective clothing.

**Eye protection:** Wear appropriate safety glasses or goggles.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Light brown powder

**Odor:** No data available

**Odor threshold:** No data available

**pH:** No data available

**Melting point/Freezing point:** 125-132°C (257-269.6°F)

**Initial boiling point and range:** 300.5° (572.9°F)

**Flash point:** 244°C (471.2°F)

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**Relative density:** No data available

**Solubility in water:** Soluble

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

---

**Decomposition temperature:** No data available

**Viscosity:** No data available

---

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage condition.

**Possibility of hazard reaction:** Hazardous polymerization does not occur.

**Conditions to avoid:** No data available.

**Incompatible materials:** Strong oxidizing agents.

**Hazard decomposition products:** Hazard decomposition products formed under fire conditions:  
Carbon oxides, nitrogen oxides.

---

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

LD50 Oral – Rat – 404 mg/kg

### Potential health effects:

**Skin:** Irritant.

**Eye:** Irritant.

**Ingestion:** Harmful if swallowed

**Inhalation:** May be harmful if inhaled.

**Carcinogenicity:** This is or contains a component that has been reported to be carcinogenic based on its ACGIH, IARC, and NTP classification.

Possible human carcinogen.

---

## 12. ECOLOGICAL INFORMATION

**Eco-toxicity:** No data available

**Persistence and degradability:** No data available

---

**Bio-accumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** No data available

---

### 13. DISPOSAL CONSIDERATION

Observe all federal, state and local regulations.

---

### 14. TRANSPORT INFORMATION

**DOT (US):** Regulated as hazardous material during transportation.

**UN number:**

**UN proper shipping name:**

**Transport hazard class:**

**Packing group:**

---

### 15. REGULATORY INFORMATION

**US State Right to Know Laws:**

**California Proposition 65:** This product contains a chemical known to the State of California to cause cancer.

---

### 16. OTHER INFORMATION

**SDS Creation date:** 9/14/2015

**Revision #:** 3

#### Disclaimer

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Helena Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.