



540 DIVISION STREET ■ CAMPBELL ■ CALIFORNIA 95008-6906 ■ USA  
408-866-6363 ■ 800-726-3213 ■ FAX 408-866-6364 ■ EMAIL [info@listlabs.com](mailto:info@listlabs.com)  
WEBSITE [www.listlabs.com](http://www.listlabs.com)

Product #150

## MATERIAL SAFETY DATA SHEET Diphtheria Toxin

### Hazardous Ingredients:

On a weight basis, diphtheria toxin constitutes 66% of the total mass in a 1.0 mg vial.

### Physical Properties:

The toxic component is a protein that has been lyophilized in the presence of 0.01 M tris(hydroxymethyl)aminomethane, 0.001 M Na<sub>2</sub>EDTA at pH 7.5.

### Health Hazard Data:

The MLD (minimum lethal dose) in humans is  $\leq 100$  ng/kg when injected intramuscularly in an unimmunized adult.

### Emergency Procedures:

The toxin has no effect if administered orally, as it is unstable at acid pH. If inadvertent skin pricking should occur, encourage bleeding and perform vigorous flushing of the area with copious amounts of water and/or saline. If i.v. or i.m. injection should occur, seek a physician's attention immediately.

### Handling:

Good laboratory technique should be employed in the safe handling of diphtheria toxin. Observe the following practices: Avoid mouth pipetting. Do not work with the toxin in the dried state. Work only with reconstituted material. Work in a well ventilated area and avoid inhalation of the product. Wear protective gloves when handling the material. Avoid contact with open wounds. Wash thoroughly any area of the body that comes into contact with the toxin. It is recommended that laboratory personnel handling the material have current diphtheria immunization. This product is intended for research purposes only and is not intended for use in humans.

### Reactivity:

No incompatibilities nor hazardous decomposition products are known. Hazardous polymerization will not occur.

### Deactivation:

Either lower pH to approximately 1 or raise pH to approximately 12 and follow by boiling for 30 minutes.