

# Safety Data Sheet

Issuing Date Dec-05-2014

Revision Number 1

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### Product identifier

**Product name** Orthotolidine (OTO) Solution

### Other means of identification

**Product Code(s)** 79000CLXO

**UN-No** 1789

### Recommended use of the chemical and restrictions on use

**Recommended Use** Test kit reagent for water testing. Laboratory chemicals. Industrial (not for food or food contact use).

### Details of the supplier of the safety data sheet

#### Supplier Address

Easy 123 Pool Care LLC  
N Brown Road, GA 30043  
SOS-POOL (1-800-767-7665)

### Emergency telephone number

CHEMTREC (US): 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1B

### EMERGENCY OVERVIEW

#### DANGER

#### Hazard statements

Causes severe skin burns and eye damage. May cause cancer.



**Appearance** Clear, colorless

**Physical state** liquid

**Odor** pungent

#### Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not ingest. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling.

#### Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical name	CAS-No	Weight %
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride)	612-82-8	0.13
Hydrochloric acid	7647-01-0	5.14
Water	7732-18-5	to 100%

### 4. FIRST AID MEASURES

**FIRST AID MEASURES**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Consult a physician.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Call a physician immediately.
<b>Ingestion</b>	Clean mouth with water. Do NOT induce vomiting. Call a physician immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.
<b><u>Protection of First-aiders</u></b>	Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation. Use personal protective equipment. Refer to Section 8. Do not touch damaged packages or spilled material. Avoid contact with skin, eyes, and inhalation of vapors.

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for cleaning up** Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool, and well-ventilated place. To maintain product quality, do not store in heat or direct sunlight. Do not store in metal containers. Keep out of the reach of children.

**Incompatible Products** Strong bases. Metals. Reducing agents. Oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	-	-	None Established
Hydrochloric acid 7647-01-0	Ceiling: 2 ppm	Ceiling 5 ppm (7mg/m <sup>3</sup> )	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>
Water 7732-18-5	-	-	None Established

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face Protection** Safety glasses with side-shields.

**Skin and body protection** Wear protective gloves/clothing.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical state** liquid  
**Appearance** Clear, colorless **Odor** pungent

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>		
<b>Melting point/freezing point</b>	No information available	
<b>Boiling Point/Range</b>	100 °C / 212 °F	
<b>Flash point</b>	No information available	
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

**Other information**

**Softening point** No information available  
**Molecular weight** No information available  
**VOC Content** No information available  
**Density** No information available  
**Bulk density** No information available

**10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions of use and storage.  
**Hazardous Reactions** None under normal processing.  
**Hazardous polymerization** Hazardous polymerization does not occur.  
**Conditions to avoid** Excessive heat. Incompatible products. Direct sunlight.  
**Incompatible materials** Strong bases. Metals. Reducing agents. Oxidizing agents.  
**Hazardous decomposition products** Chlorine gas. Hydrogen chloride. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component Information**

<b>Chemical name</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	None Established	None Established	None Established

Hydrochloric acid 7647-01-0	238 - 277 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 1.68 mg/L ( Rat ) 1 h
Water 7732-18-5	> 90 mL/kg ( Rat )	None Established	None Established

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	-	None Established	None Established	-
Hydrochloric acid 7647-01-0	-	Group 3	None Established	-
Water 7732-18-5	-	None Established	None Established	-

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (dermal) 97471 mg/kg

ATEmix (inhalation-dust/mist) 9.8 mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Unknown Aquatic Toxicity** 0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	None Established	None Established	None Established
Hydrochloric acid 7647-01-0	None Established	282: 96 h Gambusia affinis mg/L LC50 static	None Established
Water 7732-18-5	None Established	None Established	None Established

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	None Established
Hydrochloric acid 7647-01-0	None Established
Water 7732-18-5	None Established

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method**

Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.

**Contaminated packaging**

Do not re-use empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	None Established	-	None Established	None Established

Hydrochloric acid 7647-01-0	None Established	-	None Established	None Established
Water 7732-18-5	None Established	-	None Established	None Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	None Established	None Established	None Established	None Established
Hydrochloric acid 7647-01-0	None Established	None Established	None Established	None Established
Water 7732-18-5	None Established	None Established	None Established	None Established

Chemical name	California Hazardous Waste Status
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	-
Hydrochloric acid 7647-01-0	-
Water 7732-18-5	-

**14. TRANSPORT INFORMATION**

**DOT**

UN-No 1789  
 Proper shipping name HYDROCHLORIC ACID  
 Hazard Class 8  
 Packing group III  
 Reportable Quantity (RQ) 5000

**IATA**

UN-No 1789  
 Proper shipping name HYDROCHLORIC ACID  
 Hazard Class 8  
 Packing group III

**IMDG/IMO**

UN-No 1789  
 Proper shipping name HYDROCHLORIC ACID  
 Hazard Class 8  
 Packing group III

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA Complies  
 DSL/NDSL Complies  
 EINECS/ELINCS Complies  
 ENCS Complies  
 IECS Complies  
 KECL Complies  
 PICCS Complies

AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	0.1
Hydrochloric acid 7647-01-0	1.0
Water 7732-18-5	None Established

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	None Established	None Established	None Established	None Established
Hydrochloric acid 7647-01-0	5000 lb	None Established	None Established	X
Water 7732-18-5	None Established	None Established	None Established	None Established

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	-	None Established	-
Hydrochloric acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ
Water 7732-18-5	-	None Established	-

**U.S. State Regulations****California Proposition 65**

WARNING! This product contains a chemical known to the State of California to cause cancer

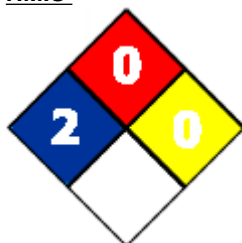
Chemical name	California Prop. 65
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	Carcinogen
Hydrochloric acid 7647-01-0	None Established
Water 7732-18-5	None Established

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ortho-tolidine dihydrochloride hydrate (3,3'-Dimethylbenzidine dihydrochloride) 612-82-8	X	None Established	None Established
Hydrochloric acid 7647-01-0	X	X	X
Water 7732-18-5	None Established	None Established	X

**16. OTHER INFORMATION**

**NFPA** Health hazard 2 Flammability 0 Instability 0 Physical and Chemical Hazards N/A  
**HMIS** Health hazard 2 Flammability 0 Physical hazards 1 Personal precautions B



Health Hazard	2
Fire Hazard	0
Reactivity	1

Prepared by Regulatory Affairs Department  
 Issuing Date Dec-05-2014  
 Revision Date Dec-16-2014  
 Reason for revision Initial Release

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**