SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH) &
COMMISSION REGULATION (EU) 2020/878

SECTION 1: Identification of the substance /mixture and of the company/undertaking

1.1. Product identifier

Product Name	SWIMMING POOL TEST KIT- OTO SOLUTION
REACH registration number	No information available
Unique Formula Identifier(UFI)	**H532-2058-N00J-WQFH**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Test free chlorine
Uses advised against	No information available

1.3. Details of the supplier of the safety data sheet

Supplier	Ningbo Dongchuan Swimming Pool Equipments Co.,Ltd.
Address	No.3 Xiling Industrial Park, Xiaowangmiao Sub-district, Fenghua District, Ningbo, China
Postal Code	315599
Phone	+86-574-88159776
FAX	
E-mail	jerry@chinapools.cn

Importer	
Address	
Postal Code	
Phone	
FAX	
E-mail	

1.4. Emergency telephone number

+86-574-88159776

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation Category 1 Sub-category C - (H314)
Serious eye damage/eye irritation Category 1 - (H318)

2.2. Label elements

Symbols/Pictograms

Signal word	Warning
Hazard Statements	H314 - Causes severe skin burns and eye damage
Precautionary Statements	

P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P310 - Immediately call a POISON CENTER or doctor/physician

2.3. Other hazards

No information available

SECTION 3: Composition/information on ingredients

3.1 Mixture

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water ,distilled, conductivity or of similar purity	231-791-2	7732-18-5	89-100	Not classified
hydrochloric acid (36-38%)	231-595-7	7647-01-0	0-10	Skin Corr. 1B (H314) STOT SE 3 (H335)
o-Tolidine	204-358-0	119-93-7	0-1	Acute Tox. 4 (H302) Carc. 1B (H350) Aquatic Chronic 2 (H411)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Remove contaminated clothing and shoes. If symptoms persist, call a physician.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. .

4.2. Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	CO_2, powder or water spray. Fight larger fires withwater spray or alcohol resistant foam.
Unsuitable extinguishing media	No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors: carbon oxides, nitric oxides, chloride ,etc

5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.
Wear protective equipment. Keep unprotected persons away.
Remove all sources of ignition.
Avoid contact with skin, eyes and inhalation of vapors
Use personal protection recommended in Section 8

6.2. Environmental precautions

Local authorities should be advised if significant spillages cannot be contained
Prevent entry into waterways, sewers, basements or confined areas

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13)

6.4. Reference to other sections

See Section 7 for more information
See section 8 for more information
See section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice
Ensure adequate ventilation, especially in confined areas
Prevent formation of aerosols.
Avoid contact with skin, eyes or clothing
Wash contaminated clothing before reuse
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Wash thoroughly after handling
Use personal protection recommended in Section 8

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place
Store only in the original receptacle.
Keep away from heat
Protect from sunlight
Do not store together with alkalis (caustic solutions).
Store away from oxidizing agents.
Store away from metals.
Do not store together with textiles.

Keep locked up and out of reach of children
Keep away from food, drink and animal feeding stuffs
Store in accordance with local regulations

7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	Australia	Austria	Belgium	Denmark	European Union
Hydrochloric acid 7647-01-0	5 ppm Peak 7.5 mg/m³ Peak	STEL 10 ppm STEL 15 mg/m³ TWA: 5 ppm TWA: 8 mg/m³	-	Ceiling: 5 ppm Ceiling: 8 mg/m³	TWA 5 ppm TWA 8 mg/m³ STEL 10 ppm STEL 15 mg/m³
o-Tolidine 119-93-7	Skin	Skin	-	-	-

Chemical Name	Latvia	France	Finland	Germany	Italy
Hydrochloric acid 7647-01-0	TWA: 5 ppm TWA: 8 mg/m³ STEL: 10 ppm STEL: 15 mg/m³	STEL: 5 ppm STEL: 7.6 mg/m³	STEL: 5 ppm STEL: 7.6 mg/m³	TWA: 2 ppm TWA: 3.0 mg/m³ Ceiling / Peak: 4 ppm Ceiling / Peak: 6 mg/m³ TWA: 3 mg/m³	TWA: 5 ppm TWA: 8 mg/m³ STEL: 10 ppm STEL: 15 mg/m³
o-Tolidine 119-93-7		-	-	Skin	-

Chemical Name	Poland	Portugal	Spain	Switzerland	Netherlands
Hydrochloric acid 7647-01-0	STEL: 10 mg/m³ TWA: 5 mg/m³	Ceiling: 2 ppm	STEL: 10 ppm STEL: 15 mg/m³ TWA: 5 ppm TWA: 7.6 mg/m³	STEL: 4 ppm STEL: 6 mg/m³ TWA: 2 ppm TWA: 3.0 mg/m³	STEL: 15 mg/m³ TWA: 8 mg/m³
o-Tolidine 119-93-7	-	-	-	TWA: 0.003 ppm TWA: 0.03 mg/m³	-

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric acid 7647-01-0	Ceiling: 5 ppm Ceiling: 7 mg/m³	STEL: 5 ppm STEL: 8 mg/m³ TWA: 1 ppm TWA: 2 mg/m³	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m³ Ceiling: 5 ppm Ceiling: 7 mg/m³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m³
o-Tolidine 119-93-7	-	-	S*	-	Ceiling: 0.02 mg/m³ 60 min

7647-01-0 Hydrochloric acid	
IOELV (EU)	Short-term value: 15 mg/m³, 10 ppm Long-term value: 8 mg/m³, 5 ppm
WEL (Great Britain)	Short-term value: 8 mg/m³, 5 ppm Long-term value: 2 mg/m³, 1 ppm (gas and aerosol mists)
PEL (America)	Short-term value: C 7 mg/m³, C 5 ppm
REL (America)	Short-term value: C 7 mg/m³, C 5 ppm
TLV (America)	Short-term value: C 2,98 mg/m³, C 2 ppm
119-93-7 o-Tolidine	
REL (America)	Short-term value: C 0,02* mg/m³ *60-min; Skin
TLV (America)	Skin; L

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)
No information available.

8.2. Exposure controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles)
Hand Protection	Wear protective gloves when handling The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glovematerial can be given for the product/ the preparation/the chemical mixture. Selection of the glove material on consideration ofthe penetration times, rates of diffusion and the degradation. *Material of gloves:* The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. *Penetration time of glove material:* The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Skin and body protection	Suitable protective clothing
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls
Do not allow into any sewer, on the ground or into any body of water

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Color	Slight yellow
Odor	Odorless
Odor Threshold	No information available
pH	< 1.0
Melting point/freezing point	-10 °C
Boiling point / boiling range	Not available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	No information available
Vapor Pressure	14mbr
Vapor density	No information available
Density	ca. 1 g/cm³
Relative density	No information available
Bulk density	No information available
Specific gravity	No information available
Water solubility	Product is water solution
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available

Kinematic viscosity	Hydrochloric acid: 0.0000017 other: m2/s z at 20 °C
Dynamic viscosity	No information available
Explosive properties	Product does not present an explosion hazard.
Oxidizing properties	No information available

9.2. Other information
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid
Strong heating and incompatible material

10.5. Incompatible materials
Bases. Amines. Alkali metals. Metals. Oxidizing agents.

10.6. Hazardous decomposition products
Thermal decomposition can lead to carbon oxides, nitric oxides, chloride ,etc

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid	= 900 mg/kg (Rabbit)	> 5010 mg/kg (Rabbit)	= 3124 ppm (Rat) 1 h
o-Tolidine (CAS #: 119-93-7)	= 404 mg/kg (Rat)		

Skin corrosion/irritation
Contact causes severe skin irritation and possible burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity

Chemical Name	European Union	IARC
Hydrochloric acid	–	Group 3
o-Tolidine	Carc. 1B	Group 2B

Reproductive toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration hazard
No information available.

SECTION 12: Ecological information

12.1. Toxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Hydrochloric acid	-	282: 96 h Gambusia affinis mg/L LC50 static	-

12.2. Persistence and degradability
No information available.

12.3. Bioaccumulative potential
No information available.

12.4. Mobility in soil
No information available

12.5. Results of PBT and vPvB assessment
PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

12.6. Other adverse effects
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

14.1	**UN Number**	Not regulated
14.2	**Proper shipping name**	Not regulated
14.3	**Hazard Class**	Not regulated
14.4	**Packing Group**	Not regulated
14.5	**Environmental hazards**	Not marine pollutant
14.6	**Special precautions**	No information available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
Take note of Directive 94/33/EC on the protection of young people at work
Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

International Inventories

Component	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Water,distilled,conductivity or of similar purity 7732-18-5	X	X	X	-	X	X	X	X
Hydrochloric acid 7647-01-0	X	X	X	X	X	X	X	X
o-Tolidine 119-93-7	X	X	X	X	X	X	X	X

"-" Not Listed
"X" Listed

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Issue Date 31-Aug-2023
Revision date 31-Aug-2023
Revision Note Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European 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

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed
H350 - May cause cancer if swallowed
H411 - Toxic to aquatic life with long lasting effects
H314 - Causes severe skin burns and eye damage
H335 – May cause respiratory irritation.

Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

-------- End of Safety Data Sheet --------