

SAFETY DATA SHEET

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Revision Number 2



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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name INDICATOR SOLUTION #1

Other means of identification

UN-No. UN1789

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Swimming Pool Repair & Maintenance

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Poolmaster
Supplier Address 770 Del Paso Road
Sacramento
California
95834
US

Supplier Phone Number Phone:916.567.9800
Fax:916.567.9880
Contact Phone9165679800
purchasing@poolmaster.com

Supplier Email
Emergency telephone number 24 HOUR EMERGENCY NUMBER (CHEM-TEL): USA, Canada, Puerto Rico
800-255-3924.
Outside North American Continent: 813-248-0585 (Call Collect If Necessary)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)



| | |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |
| Carcinogenicity | Category 2 |

GHS Label elements, including precautionary statements**Emergency Overview**

| | | | |
|---|--|-----------------------|----------|
| Signal word | Danger | | |
| Hazard Statements | Causes severe skin burns and eye damage Suspected of causing cancer | | |
|  | | | |
| Appearance | Clear, colorless | Physical State | Liquid |
| | | Odor | Odorless |

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 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
Specific treatment (see supplemental first aid instructions on this label)

Eyes

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

Skin

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

Inhalation

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

Ingestion

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

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

Other information

No information available

Interactions with Other Chemicals

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Hazard | CAS# | Name | Weight-% | PEL | TLV |
|--------|-----------|---|----------|------------------------|------------------|
| Yes | 612-82-8 | Ortho-tolidine dihydrochloride hydrate (3,3'- Dimethylbenzidine dihydrochloride) | <0.13 | None Established | None Established |
| Yes | 7647-01-0 | Hydrogen Chloride | 5.14 | Ceiling 5 ppm (7mg/m3) | Ceiling 2ppm |
| No | 7732-18-5 | Water | to 100 | None Established | None Established |

4. FIRST AID MEASURES**First aid measures****General Advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Seek immediate medical attention/advice.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.



Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects Burning sensation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

CO2 (except for Cyanides), dry chemical, dry sand, alcohol-resistant foam. Water spray, fog or alcohol-resistant foam. Move containers from fire area if you can do it without risk. Use water spray or fog; do not use straight streams. Dike fire control water for later disposal; do not scatter the material.

Unsuitable extinguishing media

Note: Most foams will react with the material and release corrosive/toxic gases.

Specific Hazards Arising from the Chemical

Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Substance will react with water (some violently), releasing corrosive and/or toxic gases. Reaction with water may generate much heat which will increase the concentration of fumes in the air. Containers may explode when heated or if contaminated with water.

Uniform Fire Code Corrosive: Acid-Liquid

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

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 ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk.

Other Information DO NOT GET WATER INSIDE CONTAINERS.

Environmental Precautions

Environmental Precautions Prevent entry into waterways, sewers, basements or confined areas. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.

Methods and material for containment and cleaning up

Methods for Containment A vapor suppressing foam may be used to reduce vapors. Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

Methods for cleaning up Soak up with inert absorbent material. Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

Incompatible Products Acids. Bases. Oxidizing agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines



| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------|----------------|--|--|
| Hydrogen Chloride 7647-01-0 | Ceiling: 2 ppm | Ceiling: 5 ppm Ceiling: 7 mg/m ³ | IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³ |

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Face protection shield.

Skin and Body Protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. For environmental protection, remove and wash all contaminated protective equipment before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical State | Liquid | Odor | Odorless |
| Appearance | Clear, colorless | Odor Threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> | <u>Method</u> |
|-------------------------------|-------------------|----------------|---------------|
| pH | 0.01 | None known | |
| Melting / freezing point | No data available | None known | |
| Boiling point / boiling range | 100 °C / 212 °F | None known | |
| Flash Point | No data available | None known | |
| Evaporation Rate | No data available | None known | |
| Flammability (solid, gas) | No data available | None known | |
| Flammability Limit in Air | | | |
| Upper flammability limit | No data available | | |
| Lower flammability limit | No data available | | |
| Vapor pressure | No data available | None known | |
| Vapor density | No data available | None known | |
| Specific Gravity | No data available | None known | |
| Water Solubility | Soluble in water | None known | |



| | | |
|---|-------------------|------------|
| Solubility in other solvents | No data available | None known |
| Partition coefficient: n-octanol/water | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Explosive properties | No data available | None known |
| Oxidizing Properties | No data available | None known |

Other Information

| | |
|-----------------------------------|-------------------|
| Softening Point | No data available |
| VOC Content (%) | No data available |
| Particle Size | No data available |
| Particle Size Distribution | |

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Acids. Bases. Oxidizing agent.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information****Inhalation**

Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

| | |
|---------------------|---|
| Eye Contact | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes. |
| Skin Contact | Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. |
| Ingestion | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|---------------------|-------------------------|------------------------|
| Hydrogen Chloride 7647-01-0 | = 700 mg/kg (Rat) | > 5010 mg/kg (Rabbit) | = 3124 ppm (Rat) 1 h |

Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|-------|----------|------------------------|------|
| Hydrogen Chloride 7647-01-0 | | Group 3 | | |
| 3,3'-Dimethylbenzidine dihydrochloride 612-82-8 | A3 | Group 2B | Reasonably anticipated | |

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic Toxicity

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Contains a known or suspected carcinogen.

Target Organ Effects

Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Teeth.

Aspiration Hazard

No information available.

Numerical measures of toxicity Product Information

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

ATEmix (oral)

13,619.00 mg/kg

ATEmix (inhalation-gas)

30,389.00 ppm (4 hr)

ATEmix (inhalation-dust/mist)

9.75 mg/l

ATEmix (inhalation-vapor)

58.00 ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|--------------------------------|-------------------|--|----------------------------|----------------------------|
| Hydrogen Chloride 7647-01-0 | | 96h LC50: = 282 mg/L (Gambusia affinis) | | |

Persistence and Degradability

No information available.

Bioaccumulation

No information available

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|-------------------------------|---|
| Disposal methods | This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). |
| Contaminated Packaging | Dispose of contents/containers in accordance with local regulations. |
| US EPA Waste Number | D002 |

California Hazardous Waste Codes 791

14. TRANSPORT INFORMATION

DOT

| | |
|--|-----------------------------------|
| UN-No. | UN1789 |
| Proper Shipping Name | HYDROCHLORIC ACID |
| Hazard Class | 8 |
| Packing Group | III |
| Description | UN1789, HYDROCHLORIC ACID, 8, III |
| Emergency Response Guide Number | 157 |

TDG

| | |
|-----------------------------|-----------------------------------|
| UN-No. | UN1789 |
| Proper Shipping Name | HYDROCHLORIC ACID |
| Hazard Class | 8 |
| Packing Group | III |
| Description | UN1789, HYDROCHLORIC ACID, 8, III |

MEX

| | |
|-----------------------------|-----------------------------------|
| UN-No. | UN1789 |
| Proper Shipping Name | HYDROCHLORIC ACID |
| Hazard Class | 8 |
| Packing Group | III |
| Description | UN1789, HYDROCHLORIC ACID, 8, III |

ICAO

| | |
|-----------------------------|-----------------------------------|
| UN-No. | UN1789 |
| Proper Shipping Name | HYDROCHLORIC ACID |
| Hazard Class | 8 |
| Packing Group | III |
| Description | UN1789, HYDROCHLORIC ACID, 8, III |

IATA

| | |
|-----------------------------|---------------|
| UN-No. | UN1789 |
| Proper Shipping Name | NON REGULATED |
| Hazard Class | N/A |
| Packing Group | III |



Description UN1789, HYDROCHLORIC ACID, 8, III

IMDG/IMO

UN-No. UN1789
Proper Shipping Name HYDROCHLORIC ACID
Hazard Class N/A
Packing Group III
EmS-No. F-A, S-B
Description UN1789, HYDROCHLORIC ACID, 8, III

RID

UN-No. UN1789
Proper Shipping Name HYDROCHLORIC ACID
Hazard Class 8
Packing Group III
Classification code C1
Description UN1789, HYDROCHLORIC ACID, 8, III

ADR

UN-No. UN1789
Proper Shipping Name HYDROCHLORIC ACID
Hazard Class 8
Packing Group III
Classification code C1
Tunnel restriction code (E)
Description UN1789, HYDROCHLORIC ACID, 8, III

ADN

UN-No. UN1789
Proper Shipping Name HYDROCHLORIC ACID
Hazard Class 8
Packing Group III
Classification code C1
Special Provisions 520
Description UN1789, HYDROCHLORIC ACID, 8, III
Limited Quantity 5 L

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US 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 | CAS No | Weight-% | SARA 313 - Threshold Values % |
|-------------------------------|-----------|----------|-------------------------------|
| Hydrogen Chloride - 7647-01-0 | 7647-01-0 | 3 - 7 | 1.0 |



| | | | |
|---|----------|---------|-----|
| 3,3'-Dimethylbenzidine dihydrochloride - 612-82-8 | 612-82-8 | 0.1 - 1 | 0.1 |
|---|----------|---------|-----|

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 |

CWA (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 |
|--------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Hydrogen Chloride 7647-01-0 | 5000 lb | | | X |

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 | Extremely Hazardous Substances RQs | RQ |
|--------------------------------|--------------------------|------------------------------------|--|
| Hydrogen Chloride 7647-01-0 | 5000 lb | 5000 lb | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

| Chemical Name | California Proposition 65 |
|---|---------------------------|
| 3,3'-Dimethylbenzidine dihydrochloride - 612-82-8 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Rhode Island | Illinois |
|--|------------|---------------|--------------|--------------|----------|
| 3,3'-Dimethylbenzidine dihydrochloride 612-82-8 | X | | | X | |

International Regulations**Mexico****National occupational exposure limits**

| Component | Carcinogen Status | Exposure Limits |
|--|-------------------|--|
| Hydrogen Chloride 7647-01-0 (3 - 7) | | Mexico: Ceiling 5 ppm Mexico: Ceiling 7 mg/m ³ |

Mexico - Occupational Exposure Limits - Carcinogens

Canada**WHMIS Hazard Class**

E - Corrosive material

D2A - Very toxic materials





16. OTHER INFORMATION

| | | | | |
|-------------|---------------------------|-----------------------|--------------------------|---|
| NFPA | Health Hazards 3 | Flammability 0 | Instability 0 | Physical and Chemical Hazards - Personal Protection X |
| HMIS | Health Hazards 3 * | Flammability 0 | Physical Hazard 0 | |

Chronic Hazard Star Legend * = Chronic Health Hazard

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date 18-Feb-2015

Revision Note No information available

Disclaimer

The information provided in this 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

