

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 02/26/2015

Reviewed on 02/26/2015

1 Identification

- **Product identifier**
- **Trade name:** OTO Indicator Solution
- **Article number:** 23241, 23243, 23244, 63241, 74320, 74411, 99232, 02122166
- **Recommended use and restriction on use**
- **Recommended use:** Indicator solution
- **Restrictions on use:** See Sections 8 and 10 for further information.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Poolmaster
770 Del Paso Road
Sacramento, CA 95834 USA
(916) 567 9800
Purchasing@poolmaster.com
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 1B H350 May cause cancer.



GHS05 Corrosion

Met. Corr.1 H290 May be corrosive to metals.

Eye Irrit. 2B H320 Causes eye irritation.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

salts of 4,4'-bi-o-toluidine

- **Hazard statements**

H290 May be corrosive to metals.

H320 Causes eye irritation.

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H350 May cause cancer.

· **Precautionary statements**

- P280 Wear protective gloves/protective clothing/eye protection.
- P234 Keep only in original container.
- P264 Wash thoroughly after handling.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P390 Absorb spillage to prevent material damage.
- P406 Store in corrosive resistant container with a resistant inner liner.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Hazard description:**· **Hazards not otherwise classified (HNOC)**

There are no other hazards not otherwise classified that have been identified.

· **Unknown Toxicity**

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

· **WHMIS-symbols:**

D2A - Very toxic material causing other toxic effects

E - Corrosive material

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *1

Fire = 0

Reactivity = 0

* - Indicates a long term health hazard from repeated or prolonged exposures.

· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with nonhazardous additions.

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· Dangerous components:

7647-01-0	hydrochloric acid	5-10%
	 Met. Corr. 1, H290; Skin Corr. 1B, H314  STOT SE 3, H335	
612-82-8	salts of 4,4'-bi-o-toluidine	0.1-0.5%
	 Carc. 1B, H350  Acute Tox. 4, H302	

· Additional information:

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

4 First-aid measures

· Description of first aid measures**· General information:** No special measures required.**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:**

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· Information for doctor:**· Most important symptoms and effects, both acute and delayed**

Slight irritant effect on skin and mucous membranes.

Nausea in case of ingestion.

Coughing

· Danger May cause cancer.**· Indication of any immediate medical attention and special treatment needed**

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

5 Fire-fighting measures

· Extinguishing media**· Suitable extinguishing agents:** Use fire fighting measures that suit the environment.**· For safety reasons unsuitable extinguishing agents:** None.**· Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

· Advice for firefighters**· Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

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· **Additional information** No further relevant information available.

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6 Accidental release measures

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

Ensure adequate ventilation.

For large spills, wear protective clothing.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

Clean the affected area carefully; suitable cleaners are:

Warm water

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

· **Information about protection against explosions and fires:**

Keep respiratory protective device available.

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

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.

Avoid storage near extreme heat, ignition sources or open flame.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from metals.

Do not store together with alkalis (caustic solutions).

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

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- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

7647-01-0 hydrochloric acid

PEL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm
REL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm
TLV (USA)	Ceiling limit value: 2.98 mg/m ³ , 2 ppm
EL (Canada)	Ceiling limit value: 2 ppm
EV (Canada)	Ceiling limit value: 2 ppm
LMPE (Mexico)	Ceiling limit value: 2 ppm
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- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Engineering controls:** No further relevant information available.

- **Breathing equipment:**

Not required under normal conditions of use.

For large spills, respiratory protection may be advisable.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the 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.

- **For the permanent contact gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Neoprene gloves

Butyl rubber, BR

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· **Eye protection:**

Safety glasses

· **Body protection:**

Not required under normal conditions of use.

Protection may be required for spills.

· **Limitation and supervision of exposure into the environment**

No further relevant information available.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:**

Liquid

Color:

Colorless

· **Odor:**

Odorless

· **Odor threshold:**

Not determined.

· **pH-value:**

Acidic

· **Change in condition****Melting point/Melting range:**

Undetermined.

Boiling point/Boiling range:

100 °C (212 °F)

· **Flash point:**

Not applicable.

· **Flammability (solid, gaseous):**

Not applicable.

· **Auto-ignition temperature:**

Not determined.

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not self-igniting.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Explosion limits:****Lower:**

Not determined.

Upper:

Not determined.

· **Vapor pressure at 20 °C (68 °F):**

23 hPa (17 mm Hg)

· **Density at 20 °C (68 °F):**1.01 g/cm³ (8.428 lbs/gal)· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **Evaporation rate**

Not determined.

· **Solubility in / Miscibility with****Water:**

Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

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- **Viscosity:**
- Dynamic:** Not determined.
- Kinematic:** Not determined.
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Reacts with alkali (lyes).
Reacts with oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
Corrosive action on metals.
Reacts with many consumer products, releasing chlorine or chlorine oxide gas.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Chlorine
Hydrogen chloride (HCl)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **on the skin:** Slight irritant effect on skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** No further relevant information available.
- **Additional toxicological information:** Danger through skin absorption.
- **Carcinogenic categories**

· NTP (National Toxicology Program)

612-82-8 | salts of 4,4'-bi-o-toluidine

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Probable Routes of Exposure

Inhalation.
Ingestion.
Eye contact.
Skin contact.

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- **Acute effects (acute toxicity, irritation and corrosivity):** Irritating to eyes.
- **Repeated Dose Toxicity:**
May cause damage to organs through prolonged or repeated exposure.
Suspected of causing cancer.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Incinerate in accordance with local, state and federal regulations.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN3264
- **UN proper shipping name**



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

- **DOT, IATA** Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)

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- **ADR** 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID)
- **IMDG** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID)

- **Transport hazard class(es)**

- **DOT**



- **Class** 8 Corrosive substances
- **Label** 8

- **ADR**



- **Class** 8 (C1) Corrosive substances
- **Label** 8

- **IMDG, IATA**



- **Class** 8 Corrosive substances
- **Label** 8
- **Packing group**
- **DOT, ADR, IMDG, IATA** III
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Warning: Corrosive substances
- **Danger code (Kemler):** 80
- **EMS Number:** F-A,S-B
- **Segregation groups** Acids
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:**
- **DOT**
- **Quantity limitations** On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

- **ADR**

- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

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- **IMDG**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
- **UN "Model Regulation":** UN3264, Corrosive liquid, acidic, inorganic, n.o.s.
(Hydrochloric acid), 8, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 355 (extremely hazardous substances):**

7647-01-0 | hydrochloric acid

- **Section 313 (Specific toxic chemical listings):**

7647-01-0 | hydrochloric acid

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

612-82-8 | salts of 4,4'-bi-o-toluidine

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

7647-01-0 | hydrochloric acid

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- **TLV (Threshold Limit Value established by ACGIH)**

7647-01-0 | hydrochloric acid

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- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **State Right to Know Listings**

None of the ingredients is listed.

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- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

- All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

- None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

- 7647-01-0 | hydrochloric acid

- **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 02/26/2015 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

Met. Corr. 1: Corrosive to metals, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

Carc. 1B: Carcinogenicity, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- **Sources**

SDS Prepared by:

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