

### Safety Data Sheet acc. to OSHA HCS (HazCom 2012)

Printing date 07/19/2017

Reviewed on 07/19/2017

#### 1 Identification

- **Product identifier**
- **Trade name:** Mix-Indicator
- **Catalogue number:** 424332, 419212
- **Application of the substance / the mixture:** Reagent for water analysis
- **Manufacturer/Supplier:**  
Tintometer Inc.  
6456 Parkland Drive  
Sarasota, FL 34243  
USA  
phone: (941) 756-6410  
fax: (941) 727-9654  
www.lovibond.us  
Made in Germany
- **Emergency telephone number:** + 1 866 928 0789 (English, French, Spanish)

#### 2 Hazard(s) identification

- **Classification of the substance or mixture** The product is not classified as hazardous.
- **Label elements**
- **GHS label elements** none
- **Hazard pictograms** none
- **Signal word** none
- **Hazard statements** none
- **Other hazards** No further relevant information available.

#### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** aqueous solution
- **Composition and Information on Ingredients:** none
- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

#### 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes (at least 15 min) under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink 1-2 glasses of water.  
If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

#### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

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Printing date 07/19/2017

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Trade name: **Mix-Indicator**

(Contd. of page 1)

- **Special hazards arising from the substance or mixture**

- The product is not combustible.

- Formation of toxic gases is possible during heating or in case of fire.

- **Advice for firefighters**

- **Protective equipment:**

- Wear self-contained respiratory protective device.

- Wear fully protective suit.

- **Additional information**

- Collect contaminated fire fighting water separately. It must not enter the sewage system.

- Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

- Ambient fire may liberate hazardous vapours.

## 6 Accidental release measures

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

- **Advice for non-emergency personnel:** No special measures required.

- **Advice for emergency responders:** Protective equipment: see section 8

- **Environmental precautions:**

- Do not allow product to reach sewage system or any water course.

- Dilute with plenty of water.

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

- Ensure adequate ventilation.

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

- Dispose contaminated material as waste according to item 13.

- **Reference to other sections**

- See Section 8 for information on personal protection equipment.

- See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

- **Advice on safe handling:** No special precautions are necessary if used correctly.

- **Hygiene measures:**

- The usual precautionary measures for handling chemicals should be followed.

- Wash hands before breaks and at the end of work.

- Do not eat, drink or smoke when using this product.

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

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

- Protect from heat and direct sunlight.

- Protect from exposure to the light.

- Protect from humidity and water.

- **Recommended storage temperature:** 20°C +/- 5°C (approx. 68°F)

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

## 8 Exposure controls/personal protection

- **Control parameters**

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

- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Engineering measures:**

- Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

- See item 7.

- **Personal protective equipment:**

- **Breathing equipment:** Not required.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS (HazCom 2012)

Printing date 07/19/2017

Reviewed on 07/19/2017

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(Contd. of page 2)

- **Protection of hands:**  
Preventive skin protection by use of skin-protecting agents is recommended.  
After use of gloves apply skin-cleaning agents and skin cosmetics.
- **Material of gloves**  
Nitrile rubber, NBR  
Recommended thickness of the material:  $\geq 0.11$  mm
- **Penetration time of glove material**  
Value for the permeation: Level  $\leq 1$  (10 min)  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**  
Safety glasses  
use against the effects of fumes / dust
- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment:**  
Do not allow product to reach sewage system or any water course.

## 9 Physical and chemical properties

· <b>Information on basic physical and chemical properties</b>	
· <b>Appearance:</b>	
Form / Physical state:	Fluid
Color:	Dark green
· <b>Odor:</b>	Odorless
· <b>Odor threshold:</b>	Not applicable.
· <b>pH-value at 20°C (68 °F):</b>	7
· <b>Melting point/freezing point:</b>	~ 0°C (~ 32 °F)
· <b>Initial boiling point and boiling range:</b>	~100°C (~212 °F)
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not self-igniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Flammability or explosive limits:</b>	
Lower:	Not applicable.
Upper:	Not applicable.
· <b>Oxidizing properties:</b>	none
· <b>Vapor Pressure at 20°C (68 °F):</b>	23 hPa (17 mm Hg)
· <b>Density at 20°C (68 °F):</b>	1 g/cm <sup>3</sup> (8.345 lbs/gal)
· <b>Relative density:</b>	Not determined.
· <b>Vapor density:</b>	Not determined.
· <b>Evaporation rate:</b>	Not determined.
· <b>Solubility(ies)</b>	
Water:	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	Not determined.
· <b>Dynamic at 20°C (68 °F):</b>	0.952 mPas
· <b>Solvent content:</b>	
Organic solvents:	0.0 %
Water:	> 99.5 %
Solids content:	< 0.5 %
· <b>Other information</b>	No further relevant information available.

— US —  
(Contd. on page 4)

# Safety Data Sheet

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Printing date 07/19/2017

Reviewed on 07/19/2017

Trade name: **Mix-Indicator**

(Contd. of page 3)

### 10 Stability and reactivity

- **Reactivity** see section "Possibility of hazardous reactions"
- **Chemical stability** Stable at ambient temperature (room temperature).
- **Possibility of hazardous reactions**  
Violent reactions possible with:  
The generally known reaction partners of water.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** see section 5

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **on the skin:** Based on available data, the classification criteria are not met.
- **on the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.
- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b>
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None of the ingredients is listed.
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· <b>NTP (National Toxicology Program)</b>
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None of the ingredients is listed.
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· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>
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None of the ingredients is listed.
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- **Other information:** see section 8 / 15
- **Synergistic Products:** None
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):** The following statements refer to the mixture:
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Other adverse effects** Avoid transfer into the environment.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Disposal must be made according to official regulations.

(Contd. on page 5)

US

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(Contd. of page 4)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· <b>UN-Number</b> · <b>DOT, IMDG, IATA</b>	none
· <b>UN proper shipping name</b> · <b>DOT, IMDG, IATA</b>	none
· <b>Transport hazard class(es)</b> · <b>DOT, IMDG, IATA</b> · <b>Class</b>	none
· <b>Packing group</b> · <b>DOT, IMDG, IATA</b>	none
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications.

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· <b>Section 355 (Extremely hazardous substances):</b>	None of the ingredients is listed.
· <b>Section 313 (Specific toxic chemical listings):</b>	None of the ingredients is listed.
· <b>TSCA (Toxic Substances Control Act):</b>	All ingredients are listed.
· <b>Proposition 65</b>	
· <b>Chemicals known to cause cancer:</b>	None of the ingredients is listed.
· <b>Chemicals known to cause reproductive toxicity for females:</b>	None of the ingredients is listed.
· <b>Chemicals known to cause reproductive toxicity for males:</b>	None of the ingredients is listed.
· <b>Chemicals known to cause developmental toxicity:</b>	None of the ingredients is listed.
· <b>New Jersey Right-to-Know List:</b>	None of the ingredients is listed.
· <b>New Jersey Special Hazardous Substance List:</b>	None of the ingredients is listed.
· <b>Pennsylvania Right-to-Know List:</b>	None of the ingredients is listed.
· <b>Pennsylvania Special Hazardous Substance List:</b>	None of the ingredients is listed.
· <b>EPA (Environmental Protection Agency)</b>	None of the ingredients is listed.

(Contd. on page 6)

# Safety Data Sheet

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(Contd. of page 5)

<b>· NIOSH-Ca (National Institute for Occupational Safety and Health)</b>
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None of the ingredients is listed.
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- **Information about limitation of use:** Not required.
- **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** 07/19/2017 / 9
- **Abbreviations and acronyms:**
  - STOT: specific target organ toxicity
  - SE: single exposure
  - RE: repeated exposure
  - EC50: half maximal effective concentration
  - IC50: half maximal inhibitory concentration
  - NOEL or NOEC: No Observed Effect Level or Concentration
  - ACGIH® - American Conference of Governmental Industrial Hygienists
  - A1 - Confirmed human carcinogen
  - A2 - Suspected human carcinogen
  - A3 - Confirmed animal carcinogen with unknown relevance to humans
  - A4 - Not classifiable as a human carcinogen
  - A5 - Not suspected as a human carcinogen
  - IARC - International Agency for Research on Cancer
  - Group 1 - Carcinogenic to humans
  - Group 2A - Probably carcinogenic to humans
  - Group 2B - Possibly carcinogenic to humans
  - Group 3 - Not classifiable as to carcinogenicity to humans
  - Group 4 - Probably not carcinogenic to humans
  - NTP - National Toxicology Program, U.S. Department of Health and Human Services
  - Group K - Known to be Human Carcinogens
  - Group R - Reasonably Anticipated to be Human Carcinogens
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - 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)
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
- **Sources** Data arise from safety data sheets, reference works and literature.

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