



Safety Data Sheet  
acc. to OSHA HCS (HazCom 2024)

Date of issue: 05/28/2025

Reviewed on 05/23/2025

1 Identification

- Product identifier
- Trade name: **Alka-M-Photometer**
- Other means of identification
- Catalogue number: 00513211, 513210BT, 513211BT, 4513210BT, 4513211BT, 5132100BT, 00513219BT, SDT342
- 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
- Classification according to (d)(1)(ii) of § 1910.1200  
The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.
- Hazards not otherwise classified  
There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

\* 3 Composition/information on ingredients

- Chemical characterization: **Mixtures**
- Description: Mixture of organic compounds
- Composition and Information on Ingredients:  
Percent ranges are used due to the confidential product information.

|                                                                                       |             |                           |      |
|---------------------------------------------------------------------------------------|-------------|---------------------------|------|
| CAS: 124-04-9<br>EINECS: 204-673-3<br>Index number: 607-144-00-9<br>RTECS: AU 8400000 | adipic acid | ☞ Eye irritation 2A, H319 | 1–5% |
|---------------------------------------------------------------------------------------|-------------|---------------------------|------|

- 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.

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If symptoms persist consult doctor.

**Most important symptoms and effects, both acute and delayed**

irritations

after swallowing of large amounts:

thirst

gastric or intestinal disorders

**Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

## 5 Fire-fighting measures

**Extinguishing media****Suitable extinguishing agents:** Water, Carbon dioxide (CO<sub>2</sub>), Foam, Fire-extinguishing powder**For safety reasons unsuitable extinguishing agents:**

For this substance / mixture no limitations of extinguishing agents are given.

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

Can burn in fire.

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

In case of fire, the following can be released:

nitrous gases

Sulfur oxides (SO<sub>x</sub>)Nitrogen oxides (NO<sub>x</sub>)Carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>)**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:** Wear protective equipment. Keep unprotected persons away.**Advice for emergency responders:** Protective equipment: see section 8**Environmental precautions:** Do not allow product to reach sewage system or any water course.**Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Pick up mechanically.

Dispose contaminated material as waste according to section 13.

**Reference to other sections**

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

**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.

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

Wash hands before breaks and at the end of work.

**Conditions for safe storage, including any incompatibilities****Requirements to be met by storerooms and receptacles:** Store in a cool location.**Information about storage in one common storage facility:** see chapter 10**Further information about storage conditions:**

Protect from heat and direct sunlight.

Protect from exposure to the light.

Store in dry conditions.

Protect from humidity and water.

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- **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:

#### CAS: 124-04-9 adipic acid

|             |                                      |
|-------------|--------------------------------------|
| TLV (USA)   | Long-term value: 5 mg/m <sup>3</sup> |
| EL (Canada) | Long-term value: 5 mg/m <sup>3</sup> |
| EV (Canada) | Long-term value: 5 mg/m <sup>3</sup> |

- **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:**  
Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.
- **Breathing equipment:**  
Under normal use conditions according to the instruction manual no personal protective equipment is needed.  
If exposure limits are exceeded or health impacts are experienced use respiratory protective device against the effects of fume/dust/aerosol.
- **Recommended filter device for short term use:** Filter P1
- **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  
Use protective goggles that have been tested and approved in accordance with government standards (like NIOSH).
- **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

### · Information on basic physical and chemical properties

- **Physical state** Solid
- **Form:** Tablets
- **Color:** Orange
- **Odor:** Odorless
- **Odor threshold:** Not applicable.
- **Melting point/freezing point:** Not determined.
- **Initial boiling point and boiling range:** Not determined.
- **Flammability:** Can burn in fire.
- **Danger of explosion:** As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
- **Flammability or explosive limits:**
  - **Lower:** Not determined.
  - **Upper:** Not applicable (solid).
- **Flash point:** 196°C (384.8°F) (CAS: 124-04-9 adipic acid)
- **Auto-ignition temperature:** Product is not self-igniting.

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|                                                             |                                                                   |
|-------------------------------------------------------------|-------------------------------------------------------------------|
| · <b>Decomposition temperature:</b>                         | Not applicable.                                                   |
| · <b>pH-value (8.8 g/l) at 20°C (68°F):</b>                 | 3.5                                                               |
| · <b>Kinematic viscosity:</b>                               | Not applicable (solid).                                           |
| · <b>Solubility(ies)</b>                                    |                                                                   |
| · <b>Water:</b>                                             | Soluble.                                                          |
| · <b>Partition coefficient (n-octanol/water):</b>           | Not applicable (mixture).                                         |
| · <b>Vapor Pressure:</b>                                    | Not applicable.                                                   |
| · <b>Density:</b>                                           | Not determined.                                                   |
| · <b>Relative density:</b>                                  | Not determined.                                                   |
| · <b>Relative vapor density:</b>                            | Not applicable.                                                   |
| · <b>Particle characteristics</b>                           | Not determined.                                                   |
| · <b>Information with regard to physical hazard classes</b> |                                                                   |
| · <b>Oxidizing properties:</b>                              | none                                                              |
| · <b>Corrosive to metals</b>                                | Based on available data, the classification criteria are not met. |
| · <b>Other information</b>                                  |                                                                   |
| · <b>Solids content:</b>                                    | 100 %                                                             |

## 10 Stability and reactivity

- **Reactivity** Dust can combine with air to form an explosive mixture.
- **Chemical stability** Stable at ambient temperature (room temperature).
- **Possibility of hazardous reactions**  
Reacts with oxidizing agents.  
--> Forms heat.
- **Conditions to avoid** To avoid thermal decomposition do not overheat.
- **Incompatible materials:** steel
- **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.

### · **LD/LC50 values that are relevant for classification:**

#### **CAS: 124-04-9 adipic acid**

|        |      |                                                                |
|--------|------|----------------------------------------------------------------|
| Oral   | LD50 | 5700 mg/kg (rat)<br>(MERCK)                                    |
| Dermal | LD50 | >7940 mg/kg (rabbit)<br>(Registrant, ECHA: no deaths occurred) |

- **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.

### · **Information on components:**

#### **CAS: 124-04-9 adipic acid**

|                    |          |                              |
|--------------------|----------|------------------------------|
| Irritation of skin | OECD 404 | (rabbit: no irritation)      |
| Irritation of eyes | OECD 492 | (rabbit: severe irritations) |

- **Sensitization:** Based on available data, the classification criteria are not met.

### · **Information on components:**

#### **CAS: 124-04-9 adipic acid**

|               |          |                                    |
|---------------|----------|------------------------------------|
| Sensitization | OECD 406 | (guinea pig: negative)<br>(IUCLID) |
|---------------|----------|------------------------------------|

- **Interactive effects** No interactive effects between components are known.
- **Other information:** see section 8 / 15

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· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

CAS: 139-05-9 sodium cyclamate

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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Alternative sources for toxicological information** No non-standard sources for toxicological information where used.· **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.· **Information on components:**

OECD 414: Teratogenicity testing

OECD 473: Mutagenicity testing

OECD 471, 474, 476, 487: Germ cell mutagenicity testing

**CAS: 124-04-9 adipic acid**OECD 471 (negative) (Bacterial Reverse Mutation Test - Ames test)  
(IUCLID)

OECD 474 (negative) (Mammalian Erythrocyte Micronucleus Test)

· **Other 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:****CAS: 124-04-9 adipic acid**

LC50 511 mg/l/48h (gold orfe)

EC50 46 mg/l/48h (Daphnia magna) (OECD 202)

IC50 31 mg/l/72h (Desmodesmus subspicatus)  
(IUCLID)LC50 97 mg/l/96h (fathhead minnow)  
(ECOTOX)· **Bacterial toxicity:****CAS: 124-04-9 adipic acid**EC50 92 mg/l (Pseudomonas putida) (DIN 38412)  
(IUCLID)· **Persistence and degradability****CAS: 124-04-9 adipic acid**

OECD 301 B 100 % / 28 d (readily biodegradable) (CO2 Evolution Test)

· **Bioaccumulative potential**

Pow = n-octanol/wasser partition coefficient

log Pow &lt; 1 = Does not accumulate in organisms.

**CAS: 124-04-9 adipic acid**

log Pow 0.081 (.) (25°C, OECD 107)

· **Mobility in soil** No further relevant information available.

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- **Other adverse effects** Avoid transfer into the environment.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Disposal must be made according to official regulations.  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **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>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. |
| · <b>Special precautions for user</b>                                            | Not applicable.                                      |

## \*15 Regulatory information

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

### · **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

### · **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

### · **TSCA (Toxic Substances Control Act):**

All remaining components have the value ACTIVE.

|                 |                               |        |
|-----------------|-------------------------------|--------|
| CAS: 139-05-9   | sodium cyclamate              | ACTIVE |
| CAS: 124-04-9   | adipic acid                   | ACTIVE |
| CAS: 50-81-7    | ascorbic acid                 | ACTIVE |
| CAS: 62625-32-5 | Bromocresol Green Sodium Salt | ACTIVE |

### · **Hazardous Air Pollutants**

None of the ingredients is listed.

### · **Proposition 65**

#### · **Chemicals known to cause cancer:**

None of the ingredients is listed.

#### · **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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|                                                                                             |             |
|---------------------------------------------------------------------------------------------|-------------|
| · <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>                                                     |             |
| CAS: 124-04-9                                                                               | adipic acid |
| · <b>New Jersey Special Hazardous Substance List:</b>                                       |             |
| None of the ingredients is listed.                                                          |             |
| · <b>Pennsylvania Right-to-Know List:</b>                                                   |             |
| CAS: 124-04-9                                                                               | adipic acid |
| · <b>Pennsylvania Special Hazardous Substance List:</b>                                     |             |
| CAS: 124-04-9                                                                               | adipic acid |
| · <b>EPA (Environmental Protection Agency)</b>                                              |             |
| None of the ingredients is listed.                                                          |             |
| · <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>                   |             |
| None of the ingredients is listed.                                                          |             |
| · <b>Information about limitation of use:</b> Not required.                                 |             |
| · <b>Chemical safety assessment:</b> 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.

### · Relevant phrases

H319 Causes serious eye irritation.

· **Version number / date of revision:** 9 / 05/23/2025

### · Abbreviations and acronyms:

OECD: Organisation for Economic Co-operation and Development  
 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  
 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)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Eye irritation 2A: Serious eye damage/eye irritation – Category 2A

### · Sources

ECHA: European CHemicals Agency <http://echa.europa.eu>  
 ECOTOX Database

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IUCLID (International Uniform Chemical Information Database)  
Data arise from safety data sheets, reference works and literature.

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· \* **Data compared to the previous version altered.**

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