

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

Printing date 04/17/2024

Reviewed on 04/15/2024

1 Identification

- **Product identifier**
- **Trade name:** Alka-M HR Photometer
- **Catalogue number:** 00513241, 513240BT, 4513240BT, 513241BT, 4513241BT, 00513249BT
- **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**



GHS07

Eye Irritation 2A H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Hazard Communication Standard (HCS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**
H319 Causes serious eye irritation.
- **Precautionary statements**
P280 Wear protective clothing / eye 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.
P337+P313 If eye irritation persists: Get medical advice/attention.
- **Other hazards** No further relevant information available.

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 EINECS: 204-673-3 Index number: 607-144-00-9 RTECS: AU 8400000	adipic acid	 Eye Irritation 2A, H319	10–20%
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· **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; consult doctor in case of complaints.
- **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. Then 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 irritations**
- **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 (CO₂), 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:
 - Carbon monoxide (CO) and carbon dioxide (CO₂)
- **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.
 - Ensure adequate ventilation
- **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:**
 - Avoid contact with the eyes.
 - Take off immediately all contaminated clothing.
 - Wash hands before breaks and at the end of work.

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

- **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.
- **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 ³
EL (Canada)	Long-term value: 5 mg/m ³
EV (Canada)	Long-term value: 5 mg/m ³

- **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.
 - Use respiratory protective device against the effects of fume/dust/aerosol.
- **Recommended filter device for short term use:** Filter P3
- **Protection of hands:**
 - Protective gloves
 - 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: ≥ 0.11 mm
- **Penetration time of glove material**
 - Value for the permeation: Level ≤ 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 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

- **Appearance:**
- **Form / Physical state:** Tablets
- **Color:** Yellow
- **Odor:** Odorless

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· Odor threshold:	Not applicable.
· pH-value (8.2 g/l) at 20°C (68°F):	3.1
· Melting point/freezing point:	Not determined.
· Initial boiling point and boiling range:	Not determined.
· Flash point:	196°C (384.8°F) (CAS 124-04-9)
· Flammability (solid, gas):	Can burn in fire.
· Auto igniting:	Not applicable (solid).
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not self-igniting.
· 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 determined.
· Oxidizing properties:	none
· Vapor Pressure:	Not applicable.
· Density:	Not determined.
· Relative density:	Not determined.
· Vapor density:	Not applicable.
· Evaporation rate:	Not applicable.
· Solubility(ies)	
· Water:	Soluble.
· Partition coefficient (n-octanol/water):	Not applicable (mixture).
· Viscosity:	
· Kinematic:	Not applicable (solid).
· Other information	
· Solids content:	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) (MERCK)
Dermal	LD50	>7940 mg/kg (rabbit) (Registrant, ECHA: no deaths occurred)

- **Primary irritant effect:**
- **on the skin:** Based on available data, the classification criteria are not met.
- **on the eye:** Causes serious eye irritation.

· 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)

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· **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) (IUCLID)
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· **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Other information:** see section 8 / 15

· **Synergistic Products:** None

· **CMR effects (carcinogenity, 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)
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OECD 474	(negative) (Mammalian Erythrocyte Micronucleus Test)
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12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

CAS: 124-04-9 adipic acid

LC50	511 mg/l/48h (gold orfe)
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EC50	86 mg/l/48h (Daphnia magna) (OECD 202)
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IC50	31 mg/l/72h (Desmodesmus subspicatus) (IUCLID)
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LC50	97 mg/l/96h (fathhead minnow) (ECOTOX)
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· **Bacterial toxicity:**

CAS: 124-04-9 adipic acid

EC50	92 mg/l (Pseudomonas putida) (DIN 38412) (IUCLID)
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· **Persistence and degradability**

CAS: 124-04-9 adipic acid

OECD 301 B	100 % / 28 d (readily biodegradable) (CO2 Evolution Test)
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· **Other information:** The product is biodegradable.

· **Bioaccumulative potential**

Pow = n-octanol/wasser partition coefficient

log Pow < 1 = Does not accumulate in organisms.

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CAS: 124-04-9 adipic acid

log Pow 0.081 (.) (25°C, OECD 107)

- **Mobility in soil** No further relevant information available.
- **Other adverse effects**
Harmful effect due to pH shift.
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.
Hand over to hazardous waste disposers.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

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

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 components have the value 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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· 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.	
· New Jersey Right-to-Know List:	
CAS: 124-04-9	adipic acid
· New Jersey Special Hazardous Substance List:	
None of the ingredients is listed.	
· Pennsylvania Right-to-Know List:	
CAS: 124-04-9	adipic acid
· Pennsylvania Special Hazardous Substance List:	
CAS: 124-04-9	adipic acid
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
· NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· 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.

· Relevant phrases

H319 Causes serious eye irritation.

· **Version number / date of revision:** 6 / 04/15/2024

· 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

Data arise from safety data sheets, reference works and literature.
 ECHA: European CHemicals Agency <http://echa.europa.eu>

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ECOTOX Database
IUCLID (International Uniform Chemical Information Database)

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· * Data compared to the previous version altered.

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