

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

Printing date 07/24/2017

Reviewed on 07/24/2017

1 Identification

- **Product identifier**
- **Trade name:** Alka-M-Photometer
- **Catalogue number:** 00513211, 513210BT, 513211BT, 4513210BT, 4513211BT, 5132100BT, 00513219BT
- **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:** 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 Irrit. 2A, H319	2.5-5%
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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.
- **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**
irritations
after swallowing of large amounts:
thirst

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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 (CO₂), Foam, Fire-extinguishing powder
- **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.
 - nitrous gases
 - Sulfur oxides (SOx)
 - Nitrogen oxides (NOx)
 - 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.
- **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 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.
 - 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.

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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:**

- Breathing equipment:** Use respiratory protective device against the effects of fumes/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: ≥ 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 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

- Information on basic physical and chemical properties

- Appearance:**

Form / Physical state:	Tablets
Color:	Orange

- Odor:** Odorless

- Odor threshold:** Not applicable.

- pH-value (8.8 g/l) at 20°C (68 °F):** 3.5

- Melting point/freezing point:** Not determined.

- Initial boiling point and boiling range:** Not determined.

- Flash point:** Not determined.

- Flammability (solid, gas):** Not determined.

- Decomposition temperature:** Not applicable.

- Auto-ignition temperature:** Product is not self-igniting.

- Danger of explosion:** Product does not present an explosion hazard.
The following applies in general to flammable organic substances / preparations: Dust explosion possible if in powder or granular form (fine distribution), mixed with air.

- Flammability or explosive limits:**

Lower:	Not determined.
Upper:	Not determined.

- Oxidizing properties:** none

- Vapor Pressure:** Not applicable.

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· 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.
· Viscosity:	Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
Solids content:	100.0 %
· Other information	No further relevant information available.

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	5,700 mg/kg (rat) (MERCK)
Dermal	LD50	>7,940 mg/kg (rabbit) (Registrant, ECHA: no deaths occurred)
Inhalative	LC50	>7.7 mg/l/4h (rat) (dust, aerosol) (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 405	(rabbit: severe irritations) (Registrant, ECHA)

- **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)

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
CAS: 139-05-9	sodium cyclamate	3

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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.	
· 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:	
CAS: 124-04-9 adipic acid	
OECD 471	(negative) (Bacterial Reverse Mutation Test - Ames test) (IUCLID)
OECD 474	(negative) (Mammalian Erythrocyte Micronucleus Test)
· 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:	
CAS: 124-04-9 adipic acid	
LC50	511 mg/l/48h (gold orfe)
EC50	86 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 (.) (CO2 Evolution Test)
· Bioaccumulative potential	
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 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.

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- **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):

CAS 10039-26-6 is not on the TSCA Inventory listed, because it is a hydrate. It is listed on the CAS 63-42-3 number for the anhydrous form.

All ingredients are 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.

· 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

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· 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.

· Date of preparation / last revision 07/24/2017 / 4

· 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

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)

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 Irrit. 2A: Serious eye damage/eye irritation – Category 2A

· Sources Data arise from safety data sheets, reference works and literature.

· * Data compared to the previous version altered.