

Safety Data Sheet acc. to ISO/DIS 11014

Printing date 04/11/2014

Reviewed on 04/11/2014

* 1 Identification

- **Product identifier**
- **Trade name:** Organo-Phosphonate No.1
- **Catalogue number:** 00512969BT, (4)512961BT, 512963(BT), 502961, (4)512960BT
- **Relevant identified uses of the substance or mixture and uses advised against:** No further relevant information available.
- **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:** Chemtrec®: (US & Canada) 800-424-9300 (International) +1 (703) 527-3887

* 2 Hazard(s) identification

- **Classification of the substance or mixture**

US-GHS



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36: Irritating to eyes.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS07
- **Signal word** Warning
- **Hazard statements**
H319 Causes serious eye irritation.
- **Precautionary statements**
P280 Wear protective gloves / 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.
- **Canadian Hazard Symbols:**



- **WHMIS classification:**
D2B
Toxic material causing other toxic effects

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· NFPA ratings (scale 0 - 4)



Health = 1
Fire = 1
Reactivity = 0

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** mixture of organic compounds

· Composition and Information on Ingredients:

CAS: 124-04-9 EINECS: 204-673-3 Index number: 607-144-00-9 RTECS: AU 8400000	adipic acid	Xi R36 Eye Irrit. 2, H319	70-80%
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- **REACH - pre-registered substances** All components are REACH pre-registered.
- **Additional information:** For the wording of the listed risk 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 (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 inhalation:
coughing
mucous membrane irritation
after swallowing:
general feeling of sickness
breathing difficulty
- **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.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
Can burn in fire.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **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**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.

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- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Pick up mechanically.
Ensure adequate ventilation.
- **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

- **Precautions for safe handling** Prevent formation of dust.
- **Information about protection against explosions and fires:** Dust can combine with air to form an explosive mixture.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Unsuitable material for receptacle: steel.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
Store in dry conditions.
Protect from humidity and water.
Protect from exposure to the light.
- **Recommended storage temperature:** 20 °C +/- 5 °C (approx. 68°F)
- **Storage class:** 11
- **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.
- **Control parameters**

• Components with limit values that require monitoring at the workplace:

124-04-9 adipic acid (70-80%)

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

9004-34-6 cellulose (2.5-5%)

PEL (USA)	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV (USA)	Long-term value: 10 mg/m ³
EL (Canada)	Long-term value: 10 mg/m ³
EV (Canada)	Long-term value: 10 mg/m ³ paper fibre, total dust

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
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.
- **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:** After use of gloves apply skin-cleaning agents and skin cosmetics.

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- **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

- **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.

Value for the permeation: Level ≤ 1 (10 min)

- **Eye protection:**

Tightly sealed goggles

use against the effects of fumes / dust

- **Body protection:** Protective work clothing

* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **Odor Threshold:** Not applicable.

- **Appearance:**

- **Form:** Tablets

- **Color:** Green

- **Odor:** Odorless

- **pH-value (9.6 g/l) at 20 °C (68 °F):** 2.8

- **Melting point/Melting range:** Undetermined.

- **Boiling point/Boiling range:** 265 °C (509 °F)

- **Freezing Point:** Not applicable.

- **Flash point:** > 100 °C (> 212 °F)

- **Ignition temperature:** 340 °C (644 °F)

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** The following applies in general to flammable organic substances / preparations: Dust explosion possible if in powder or granular form (fine distribution), mixed with air.

- **Specific Gravity:** Not applicable.

- **Density:** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with**

- **Water:** Partly miscible.

- **Coefficient of Water / Oil Distribution:** Not applicable.

- **Solvent content:**

- **Organic solvents:** 0.0 %

- **Solids content:** 100.0 %

- **Other information** No further relevant information available.

* 10 Stability and reactivity

- **Reactivity**

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.

- **Possibility of hazardous reactions**

Reacts with reducing agents.

Reacts with strong oxidizing agents.

- **Conditions to avoid** No further relevant information available.

- **Incompatible materials:**

alkalis

oxidizing agents

- **Hazardous decomposition products:** see chapter 5

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* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Quantitative data on the toxicity of the preparation are not available.

· LD/LC50 values that are relevant for classification:

124-04-9 adipic acid

Oral	LD50	5700 mg/kg (rat) (MERCK)
Dermal	LD50	> 7940 mg/kg (rabbit)
Inhalative	LC50	> 7.7 mg/l/4h (rat) (MERCK)

- **Primary irritant effect:**
- **on the skin:** slight irritations possible
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**
CAS-No. 124-04-9:
Sensitization test (guinea pig): negative (IUCLID)

· **Additional toxicological information:** Irritant

· 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.

- **Carcinogenicity:** NTP? IARC Monographs? OSHA Regulated? see chapter 8 / 15
- **Teratogenicity:** Not found.
- **Mutagenicity:**
CAS-No. 124-04-9:
Bacterial mutagenicity: Ames Test - negative (IUCLUD)
- **Reproductive Toxicity:** Not found.
- **Synergistic Products:** None
- **CMR effects (carcinogeny, mutagenicity and toxicity for reproduction):** no further data available

* 12 Ecological information

· Toxicity

· Aquatic toxicity:

124-04-9 adipic acid

EC50	86 mg/l/48h (Daphnia magna) (MERCK-OECD 202)
LC50	511 mg/l/48h (Leuciscus idus) 97 mg/l/96h (Pimephales promelas) (ECOTOX)

- **Persistence and degradability** No further relevant information available.
- **Other information:**
Quantitative data on the ecological effect of this preparation are not available.
CAS-No. 124-04-9 adipic acid: 100% / 28 d
- **Bioaccumulative potential** No further relevant information available.

· Behavior in environmental systems:

124-04-9 adipic acid

log P(o/w)	0.081 (25 °C) (.) (MERCK-OECD 107)
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- **Mobility in soil** No further relevant information available.
- **Ecotoxic effects:**
- **Remark:** Forms corrosive mixtures with water even if diluted.

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· Algae toxicity:	
124-04-9 adipic acid	
IC50	31 mg/l/72h (Desmodesmus subspicatus) (IUCLID)
· Bacterial toxicity:	
124-04-9 adipic acid	
EC50	92 mg/l/17h (Pseudomonas putida) (IUCLID)
· Additional ecological information:	
· BSB5-value:	
124-04-9 adipic acid	
BSB5	0.598 g/g (OECD)
· General notes:	
Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized. Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.	
· Results of PBT and vPvB assessment no further data available	
· 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.
- **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, ADR, ADN, IMDG, IATA	none
· UN proper shipping name	
· DOT, ADR, ADN, IMDG	none
· IATA	none
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	none
· Packing group	
· DOT, ADR, IMDG, IATA	none
· Environmental hazards:	
· Marine pollutant:	No
· 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.
· Canadian TDG Class:	none

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*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 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.

· Canadian Ingredient Disclosure List

· Limit 0,1%

None of the ingredients is listed.

· Limit 1%

124-04-9 | adipic acid

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Non-domestic Substance List

None of the ingredients is listed.

· 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.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Australian Inventory of Chemical Substances

All ingredients are listed.

· European EINECS

All ingredients are listed.

· Standard for the Uniform Scheduling of Drugs and Poisons

None of the ingredient is listed.

- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR**
- **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.

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R36 Irritating to eyes.

· **Date of preparation / last revision** 04/11/2014 / 25· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

EC50: effective concentration, 50 percent (in vivo)

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

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)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

USA
