

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.11.2018

Version number 1

Revision: 20.11.2018

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

- **1.1 Product identifier**
- **Trade name:** API-BIOXAL
- **CAS Number:**
144-62-7
- **EC number:**
205-634-3
- **Index number:**
607-006-00-8
- **Registration number** 01-2119534576-33-xxxx
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Life cycle stages** PW Widespread use by professional workers
- **Sector of Use** SU1 Agriculture, forestry, fishery
- **Product category** PC0 Other
- **Application of the substance / the mixture**
Powder for the in-hive control of mites on honey bees. Veterinary medicine in Europe/ veterinary pesticide in the US/NZ and other countries
- **Uses advised against** Any use other than those identified is not recommended.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
CHEMICALS LAIF S.p.A.
Via dell'Artigianato, 13 - 35010 VIGONZA (PD)
tel +39 049 626281 fax +39 049 628501
www.chemicalslaif.it - info@chemicalslaif.it
- **Further information obtainable from:** info@chemicalslaif.it
- **1.4 Emergency telephone number:**
Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano)
Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)
Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo)
Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze)
Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma)
Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma)
Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli)
Centro Antiveleni di Foggia 0881 732326 (CAV Ospedale Univ. - Foggia)
Centro Antiveleni di Roma 06 68593726 (CAV Osp. Pediatrico Bambino Gesù - Roma)
Chemicals Laif - tel. +39 049 626281 (office hours)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

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- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
 - **Hazard pictograms**



GHS07

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- **Signal word** *Warning*
- **Hazard-determining components of labelling:**
oxalic acid
- **Hazard statements**
H302+H312 Harmful if swallowed or in contact with skin.
- **Precautionary statements**
 - P264 Wash thoroughly after handling.*
 - P270 Do not eat, drink or smoke when using this product.*
 - P280 Wear protective gloves / protective clothing.*
 - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*
 - P302+P352 IF ON SKIN: Wash with plenty of water.*
 - P321 Specific treatment (see on this label).*
 - P330 Rinse mouth.*
 - P362+P364 Take off contaminated clothing and wash it before reuse.*
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**
144-62-7 oxalic acid
- **Identification number(s)**
- **EC number:** 205-634-3
- **Index number:** 607-006-00-8

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Rescue workers must wear the protective equipment described in section 8.2 of this safety data sheet.
- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:**
*Generally the product does not irritate the skin.
Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
*Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.*
- **4.2 Most important symptoms and effects, both acute and delayed**
Prolonged or repeated contact with the skin may cause dermatitis. If inhaled it can cause burning of the nose and throat, cough, difficulty breathing, sore throat, symptoms of immediate effects
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.

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- CO₂, powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Under certain fire conditions, traces of other toxic gases cannot be excluded.
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:**
Use respiratory protection
See Section 8 for information on personal protection equipment.
See Section 8 for information on personal protection equipment.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Avoid formation of dust.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Pick up mechanically.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
See Section 8 for information on personal protection equipment.
Prevent formation of dust.
- **Information about fire - and explosion protection:** The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Not required.
Do not store together with alkalis (caustic solutions).
Store away from oxidising agents.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

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

144-62-7 oxalic acid

WEL	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
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- **DNELs**

144-62-7 oxalic acid

Oral	Long term, systemic effect	1.14 mg/kg (general population)
Dermal	Long term, systemic effect	1.14 mg/kg bw/day (general population)

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Inhalative	Long term, systemic effect	2.29 mg/kg bw/day (professional workers) 4.03 mg/m ³ (professional workers)
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- **PNECs**

144-62-7 oxalic acid

PNEC	0.1622 mg/l (freshwater)
	1.622 mg/l (intermittent releases)
	0.01622 mg/l (marine water)

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

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Respiratory protection:** Not required.

- **Protection of hands:**



Protective gloves

Only use EN 374-3 certified protective gloves against chemical agents.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Nitrile rubber, NBR

Neoprene gloves

Natural rubber, NR

Recommended thickness of the material: ≥ 0.2 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 2/3

- **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form: Solid

Colour: White

- **Odour:** Undistinguishable.

- **Odour threshold:** Not determined.

- **pH-value (50 g/l) at 20 °C:** 0.7

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- | | |
|---|---|
| · Change in condition | |
| Melting point/freezing point: | > 160 °C |
| Initial boiling point and boiling range: | > 160 °C |
| · Flash point: | Not applicable. |
| · Flammability (solid, gas): | Product is not flammable. |
| · Auto-ignition temperature: | Not determined. |
| · Explosive properties: | Product does not present an explosion hazard. |
| · Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| · Vapour pressure at 40 °C: | 0.4 hPa |
| · Density: | Not determined. |
| · Relative density at 20 °C | 0.813 g/cm ³ |
| · Vapour density | Not applicable. |
| · Evaporation rate | Not applicable. |
| · Solubility in / Miscibility with water at 20 °C: | 108 g/l |
| · Partition coefficient: n-octanol/water: | Not determined. |
| · Viscosity: | |
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |
| · Solids content: | 100.0 % |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- 10.1 Reactivity**
On contact with hot surfaces or flames this substance decomposes forming formic acid, carbon monoxide and carbon dioxide. The substance dissolved in water is a medium strong acid.
- 10.2 Chemical stability**
- Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions** Violent reactions with strong alkalis and oxidising agents.
- 10.4 Conditions to avoid** Avoid dust formation
- 10.5 Incompatible materials:** Aluminum, Zinc, Copper
- 10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects**
- Acute toxicity**
Harmful if swallowed or in contact with skin.

· LD/LC50 values relevant for classification:
ATE (Acute Toxicity Estimates)

Oral	LD50	375 mg/kg (rat)
Dermal	LD50	1,100 mg/kg

144-62-7 oxalic acid

Oral	LD50	375 mg/kg (rat)
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Dermal	LD50	1,100 mg/kg (ATE)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· **Aquatic toxicity:**

144-62-7 oxalic acid

CL50	160 mg/l (fish) (Esposizione 96h)
EC50	80 mg/l (algae)
	162 mg/l (daphnia) (Esposizione 48 h)

- **12.2 Persistence and degradability** Easily biodegradable
- **12.3 Bioaccumulative potential** Non significant accumulation in organisms
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· **Recommendation**

Do not discard the product or its packaging. Do not empty into drains. Recycle the product. When recycling is not possible, dispose through an authorized company in compliance with the local or national regulations. The assignment of the waste code is the user's responsibility, after determining the properties of the waste and the process generating it and after discussing it with the authorities responsible for disposal.

· **Uncleaned packaging:**

· **Recommendation:**

Empty the containers before disposal. Do not reuse the emptied containers. Send the empty containers to recycling or to an authorized company in compliance with local and national regulations.

- **Recommended cleansing agents:** Water.

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SECTION 14: Transport information

· 14.1 UN-Number	
· ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	
· ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

· Abbreviations and acronyms:

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

- * Data compared to the previous version altered.