

# Safety Data Sheet

## APICAL PLUS (AMC-AL) LT.5



Safety Data Sheet dated 8/2/2023, version 4

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

#### 1.1. Product identifier

Mixture identification:

Trade name:

APICAL PLUS (AMC-AL) LT.5

Trade code:

165621

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:

Professional use.

Fertilizer for agricultural use

Uses advised against:

The pertinent uses are listed above, other uses are not recommended

#### 1.3. Details of the supplier of the safety data sheet

Company:

ALBA MILAGRO International spa

Via F.Corridoni 19 20015 Parabiago (MI) Italy

Ph. +39 0331495211

Competent person responsible for the safety data sheet:

reach@albamilagro.com

#### 1.4. Emergency telephone number

Emergency telephone number of the company and/or of an authorised advisory centre (Monday to Friday from 8.30-12.30 and 13.30 to 17.30):

Ph. +39 0331495211

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

⚠ Warning, Acute Tox. 4, Harmful if swallowed.

⚠ Danger, Eye Dam. 1, Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

#### 2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H302 Harmful if swallowed.

H318 Causes serious eye damage.

Precautionary statements:

P264 Wash the skin and hands thoroughly after use.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor/... if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

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None  
 Contains  
 calcium nitrate  
 Special provisions according to Annex XVII of REACH and subsequent amendments:  
 None

2.3. Other hazards  
 No PBT, vPvB or endocrine disruptor substances present in concentration  $\geq 0.1\%$   
 Other Hazards:  
 No other hazards

### SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
$\geq 25\%$ - $< 30\%$	calcium nitrate	CAS: 10124-37-5 EC: 233-332-1 REACH No.: 01-2119495093-35	☠ 3.3/1 Eye Dam. 1 H318 ☠ 3.1/4/Oral Acute Tox. 4 H302
$\geq 1\%$ - $< 2,5\%$	calcium chloride	Index number: 017-013-00-2 CAS: 10043-52-4 EC: 233-140-8 REACH No.: 01-2119494219-28	☠ 3.3/2 Eye Irrit. 2 H319

### SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.  
 Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.  
**OBTAIN IMMEDIATE MEDICAL ATTENTION.**  
 Wash thoroughly the body (shower or bath).  
 Remove contaminated clothing immediately and dispose off safely.  
 After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.  
 Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or

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safety data sheet if possible).

Treatment:

None

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#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

##### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

##### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

##### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

##### 6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

##### 6.4. Reference to other sections

See also section 8 and 13

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#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

##### 7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

##### 7.3. Specific end use(s)

None in particular

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#### SECTION 8: Exposure controls/personal protection

##### 8.1. Control parameters

calcium chloride - CAS: 10043-52-4

TLV TWA - 10 mg/m<sup>3</sup> SAEL (Solvay acceptable Exposure Limit) 2003

##### DNEL Exposure Limit Values

calcium nitrate - CAS: 10124-37-5

Consumer: 8.33 mg/kg bw / day - Exposure: Human Oral - Frequency: Long Term (repeated)

Worker Industry: 13.9 mg/kg bw / day - Consumer: 8.33 mg/kg bw / day - Exposure: Human Dermal - Frequency: Long Term (repeated)

Worker Industry: 24.5 mg/m<sup>3</sup> - Consumer: 6.3 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term (repeated)

calcium chloride - CAS: 10043-52-4

Worker Industry: 10 mg/m<sup>3</sup> - Consumer: 5 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 5 mg/m<sup>3</sup> - Consumer: 2.5 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

##### PNEC Exposure Limit Values

calcium nitrate - CAS: 10124-37-5

Target: Fresh Water - Value: 0.45 mg/l

Target: Marine water - Value: 0.045 mg/l

Target: Intermittent - Value: 4.5 mg/l

Target: STP - Value: 18 mg/l

##### 8.2. Exposure controls

###### Eye protection:

Use close fitting safety goggles, don't use eye lens.

###### Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

###### Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

###### Respiratory protection:

Not needed for normal use.

###### Thermal Hazards:

None

###### Environmental exposure controls:

None

###### Appropriate engineering controls:

None

#### SECTION 9: Physical and chemical properties

##### 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	Yellow	--	--
Odour:	not significant	--	--
Odour threshold:	n.d.	--	--
Melting point/freezing point:	n.d.	--	--
Boiling point or initial boiling point and boiling	n.d.	--	--

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range:			
Flammability:	N.A.	--	--
Lower and upper explosion limit:	n.d.	--	--
Flash point:	n.d. ° C	--	--
Auto-ignition temperature:	n.d.	--	--
Decomposition temperature:	n.d.	--	--
pH:		--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	100%	--	--
Solubility in oil:	n.a.	--	--
Partition coefficient n-octanol/water (log value):	n.d.	--	--
Vapour pressure:	n.d.	--	--
Density and/or relative density:	1440 +/- 10 g/L	--	--
Relative vapour density:	n.d.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

#### 9.2. Other information

Properties	Value	Method:	Notes
Explosive properties:	n.d.	--	--
Evaporation rate:	n.d.	--	--
Miscibility:	n.d.	--	--
Conductivity:	n.d.	--	--
Viscosity:	n.d.	--	--
Oxidizing properties:	n.d.	--	--
Fat Solubility:	n.d.	--	--
Substance Groups relevant properties	n.d.	--	--

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#### SECTION 10: Stability and reactivity

- 10.1. Reactivity  
Stable under normal conditions
- 10.2. Chemical stability  
Stable under normal conditions
- 10.3. Possibility of hazardous reactions  
None
- 10.4. Conditions to avoid  
Stable under normal conditions.
- 10.5. Incompatible materials  
None in particular.
- 10.6. Hazardous decomposition products  
None.

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#### SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

calcium nitrate - CAS: 10124-37-5

a) acute toxicity:

Test: LD50 - Route: Oral > 300 mg/kg bw - Source: OECD 423

Test: LD50 - Route: Oral < 2000 mg/kg bw - Source: OECD 423

Test: LD50 - Route: Skin > 2000 mg/kg bw

b) skin corrosion/irritation:

Test: Skin Irritant Negative - Source: OECD 404

c) serious eye damage/irritation:

Test: Eye Irritant Positive - Source: OECD 405

d) respiratory or skin sensitisation:

Test: Respiratory Sensitization Negative - Source: OECD 429

e) germ cell mutagenicity:

Test: Mutagenesis Negative - Source: OECD 471, 473, 476

g) reproductive toxicity:

Test: NOAEL - Route: Oral > 1500 mg/kg bw - Source: OECD 422

calcium chloride - CAS: 10043-52-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rabbit = 1000 mg/kg - Source: (sol. 33%)

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: SOLUTION - Species: Rabbit Negative - Source: (solution)

d) respiratory or skin sensitisation:

Test: Skin Sensitization Negative

e) germ cell mutagenicity:

Test: Genotoxicity - Species: Generic Bacteria Negative

f) carcinogenicity:

Test: Carcinogenicity Negative

g) reproductive toxicity:

Test: Reproductive Toxicity - Route: Oral - Species: Rabbit Negative - Source: 169 mg/kg, 10 days NOAEL

calcium chloride - CAS: 10043-52-4

LD50 (RAT) ORAL: 1000 MG/KG

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

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- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

#### 11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration  $\geq 0.1\%$

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## SECTION 12: Ecological information

### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

calcium nitrate - CAS: 10124-37-5

#### a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 1378 mg/L - Duration h: 96 - Notes: OECD 203

Endpoint: EC50 - Species: Daphnia = 490 mg/L - Duration h: 48

Endpoint: EC50 - Species: Algae > 1000 mg/L - Duration h: 3 - Notes: OECD 209

#### b) Aquatic chronic toxicity:

Endpoint: EC50 - Species: Algae > 1700 mg/L - Notes: 10 days

Endpoint: NOEC = 180 mg/L - Notes: OECD 209

calcium chloride - CAS: 10043-52-4

#### a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 9500-11300 mg/L - Duration h: 96 - Notes: Lepomis macrochirus

Endpoint: LC50 - Species: Fish = 4630 mg/L - Duration h: 96 - Notes: Pimephales promelas

Endpoint: EC50 - Species: Crustacean = 2400 mg/L - Duration h: 48 - Notes: Daphnia magna

Endpoint: LC50 - Species: Crustacean = 1830 mg/L - Notes: Ceriodaphnia sp.

Endpoint: EC50 - Species: Algae = 2900 mg/L - Duration h: 72 - Notes: Selenastrum capricornutum

#### b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Crustacean = 320 mg/L - Notes: Daphnia magna, 21 days

### 12.2. Persistence and degradability

None

N.A.

### 12.3. Bioaccumulative potential

N.A.

### 12.4. Mobility in soil

N.A.

### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

### 12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration  $\geq 0.1\%$

### 12.7. Other adverse effects

None

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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## SECTION 14: Transport information

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- 14.1. UN number or ID number  
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name  
N.A.
- 14.3. Transport hazard class(es)  
N.A.
- 14.4. Packing group  
N.A.
- 14.5. Environmental hazards  
N.A.
- 14.6. Special precautions for user  
N.A.
- 14.7. Maritime transport in bulk according to IMO instruments  
N.A.

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#### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Dir. 98/24/EC (Risks related to chemical agents at work)
  - Dir. 2000/39/EC (Occupational exposure limit values)
  - Regulation (EC) n. 1907/2006 (REACH)
  - Regulation (EC) n. 1272/2008 (CLP)
  - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
  - Regulation (EU) n. 2020/878
  - Regulation (EU) n. 286/2011 (ATP 2 CLP)
  - Regulation (EU) n. 618/2012 (ATP 3 CLP)
  - Regulation (EU) n. 487/2013 (ATP 4 CLP)
  - Regulation (EU) n. 944/2013 (ATP 5 CLP)
  - Regulation (EU) n. 605/2014 (ATP 6 CLP)
  - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
  - Regulation (EU) n. 2016/918 (ATP 8 CLP)
  - Regulation (EU) n. 2016/1179 (ATP 9 CLP)
  - Regulation (EU) n. 2017/776 (ATP 10 CLP)
  - Regulation (EU) n. 2018/669 (ATP 11 CLP)
  - Regulation (EU) n. 2018/1480 (ATP 13 CLP)
  - Regulation (EU) n. 2019/521 (ATP 12 CLP)
  - Regulation (EU) n. 2020/217 (ATP 14 CLP)
  - Regulation (EU) n. 2020/1182 (ATP 15 CLP)
  - Regulation (EU) n. 2021/643 (ATP 16 CLP)
  - Regulation (EU) n. 2021/849 (ATP 17 CLP)
  - Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)  
Regulation (EC) nr 648/2004 (detergents).  
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1  
None

- 15.2. Chemical safety assessment  
No Chemical Safety Assessment has been carried out for the mixture.

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#### SECTION 16: Other information

Full text of phrases referred to in Section 3:

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### APICAL PLUS (AMC-AL) LT.5

H318 Causes serious eye damage.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

This safety data sheet has been completely updated in compliance to Regulation 2020/878. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Acute Tox. 4, H302	Calculation method
Eye Dam. 1, H318	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

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ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.

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INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.