



Safety Data Sheet

PH MASTER

Safety Data Sheet dated 13/12/2016, version 3

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

1.1. Product identifier

Mixture identification:

Trade name: PH MASTER

Trade code: 190800

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

Recommended use:

Professional use.

Fertilizer for agricultural use

pH-regulating agent.

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 to 12:30 and from 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):



Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.



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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

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Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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:

None

Contains

phosphoric acid ... %, orthophosphoric acid ... %

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

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
>= 30% - < 40%	phosphoric acid ... %, orthophosphoric acid ... %	Index number:	015-011-00-6	2.16/1 Met. Corr. 1 H290
		CAS:	7664-38-2	
		EC:	231-633-2	3.2/1A Skin Corr. 1A H314
		REACH No.:	01-	
		2119485924-24		
>= 0.5% - < 1%	ethanol; ethyl alcohol	Index number:	603-002-00-5	2.6/2 Flam. Liq. 2 H225
		CAS:	64-17-5	3.3/2 Eye Irrit. 2 H319
		EC:	200-578-6	
500 ppm	butanone; ethyl methyl ketone	Index number:	606-002-00-3	2.6/2 Flam. Liq. 2 H225
		CAS:	78-93-3	

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		EC:	201-159-0	 3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H336 EUH066
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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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:

Do NOT induce vomiting.

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 safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

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

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.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2

EU - TWA(8h): 1 mg/m³ - STEL: 2 mg/m³

ACGIH - TWA(8h): 1 mg/m³ - STEL: 3 mg/m³ - Notes: URT, eye and skin irr

ethanol; ethyl alcohol - CAS: 64-17-5

ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr

butanone; ethyl methyl ketone - CAS: 78-93-3

EU - TWA(8h): 600 mg/m³, 200 ppm - STEL: 900 mg/m³, 300 ppm

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ACGIH - TWA(8h): 200 ppm - STEL: 300 ppm - Notes: BEI - URT irr, CNS and PNS impair

DNEL Exposure Limit Values

phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2

Worker Industry: 2.92 mg/m³ - Consumer: 0.73 mg/m³ - Exposure: Human Inhalation Long Term, local effects

Worker Industry: 2 mg/m³ - Exposure: Human Inhalation Short Term, systemic effects

ethanol; ethyl alcohol - CAS: 64-17-5

Worker Industry: 1900 mg/m³ - Consumer: 950 mg/m³ - Exposure: Human Inhalation Short Term, local effects

Worker Industry: 343 mg/kg - Consumer: 206 mg/kg - Exposure: Human Dermal Long Term, systemic effects

Worker Industry: 950 mg/m³ - Consumer: 114 mg/m³ - Exposure: Human Inhalation Long Term, systemic effects

Consumer: 87 mg/kg - Exposure: Human Oral Long Term, systemic effects

butanone; ethyl methyl ketone - CAS: 78-93-3

Worker Industry: 1161 mg/kg - Consumer: 412 mg/kg - Exposure: Human Dermal Long Term, systemic effects

Worker Industry: 600 mg/m³ - Consumer: 106 mg/m³ - Exposure: Human Inhalation Long Term, systemic effects

Consumer: 31 mg/kg - Exposure: Human Oral Long Term, systemic effects

PNEC Exposure Limit Values

N.A.

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:
Appearance and colour:	Liquid	--	red
Odour:	Pungent	--	--
Odour threshold:	Not Relevant	--	--

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pH:	1.5	--	--
Melting point / freezing point:	n.d.	--	--
Initial boiling point and boiling range:	n.d.	--	--
Flash point:	n.d. ° C	--	--
Evaporation rate:	n.d.	--	--
Solid/gas flammability:	Not Relevant	--	--
Upper/lower flammability or explosive limits:	n.d.	--	--
Vapour pressure:	n.d.	--	--
Vapour density:	n.d.	--	--
Relative density:	1210 +/- 0.05 g/L	--	--
Solubility in water:	MISCIBLE	--	--
Solubility in oil:	n.d.	--	--
Partition coefficient (n-octanol/water):	n.d.	--	--
Auto-ignition temperature:	n.a.	--	--
Decomposition temperature:	n.d.	--	--
Viscosity:	n.d.	--	--
Explosive properties:	n.a.	--	--
Oxidizing properties:	n.d.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	n.d.	--	--
Fat Solubility:	n.d.	--	--
Conductivity:	n.d.	--	--
Substance Groups relevant properties	n.d.	--	--

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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

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N.A.

Toxicological information of the main substances found in the product:

phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1530 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 2740 mg/kg

Test: LC50 - Route: Inhalation - Species: Rabbit = 1689 mg/l - Duration: 1h

Test: LC50 - Route: Inhalation - Species: Rat = 850 mg/l - Duration: 2H

b) skin corrosion/irritation:

Test: Skin Corrosive Positive

c) serious eye damage/irritation:

Test: Eye Corrosive Positive

d) respiratory or skin sensitisation:

Test: Respiratory Sensitization Negative

Test: Skin Sensitization Negative

ethanol; ethyl alcohol - CAS: 64-17-5

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 124.7 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 10470 mg/kg

e) germ cell mutagenicity:

Test: Genotoxicity - Route: Inhalation - Species: Rat > 20000 ppm

g) reproductive toxicity:

Test: NOAEL - Route: Oral - Species: Rat > 16000 ppm

i) STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat = 1730 mg/kg - Source: 90 days

butanone; ethyl methyl ketone - CAS: 78-93-3

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Mouse > 5000 ppm

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

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

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

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.

SECTION 12: Ecological information

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12.1. Toxicity

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

phosphoric acid ... %, orthophosphoric acid ... % - CAS: 7664-38-2

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48 - Notes: (statico, OECD 202, acqua dolce)

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72 - Notes: (statico, OECD 201, acqua dolce)

Endpoint: IC50 - Species: Algae = 590 mg/l

Endpoint: LC50 - Species: Fish = 75.1 mg/l - Duration h: 96 - Notes: Oryzias latipes

ethanol; ethyl alcohol - CAS: 64-17-5

a) Aquatic acute toxicity:

Endpoint: EC10 - Species: Algae = 675 mg/l - Duration h: 96 - Notes: Chlorella vulgaris

Endpoint: EC50 - Species: Bacteria = 32100 mg/l - Notes: 15' Photobacterium phosphoreum

Endpoint: LC50 - Species: Daphnia = 5012 mg/l - Duration h: 48 - Notes: Daphnia Ceriodaphnia dubia

Endpoint: LC50 - Species: Fish = 15300 mg/l - Duration h: 96 - Notes: Pimephales promelas

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 9.6 mg/l - Notes: 9 days

butanone; ethyl methyl ketone - CAS: 78-93-3

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 308 mg/l - Duration h: 48

Endpoint: EC50 - Species: Scenedesmus subspicatus = 2029 mg/l - Duration h: 96

Endpoint: LC50 - Species: Fish = 2993 mg/l - Duration h: 48 - Notes: Pimephales promelas

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. Other adverse effects

None

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.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 3264

IATA-Un number: 3264

IMDG-Un number: 3264

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14.2. UN proper shipping name

ADR-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC. N.O.S. (contains Phosphoric Acid)

IATA-Technical name: CORROSIVE LIQUID, ACIDIC, INORGANIC. N.O.S. (contains Phosphoric Acid)

IMDG-Technical name: CORROSIVE LIQUID, ACIDIC, INORGANIC. N.O.S. (contains Phosphoric Acid)

14.3. Transport hazard class(es)

ADR-Class: 8

ADR-Label: 8

IATA-Class: 8

IATA-Label: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: NO MARINE POLLUTANT

14.6. Special precautions for user

ADR-Tunnel Restriction Code: E

Rail (RID): 8

IMDG-Technical name: CORROSIVE LIQUID, ACIDIC, INORGANIC. N.O.S. (contains Phosphoric Acid)

IMDG-EMS: F-A S-B

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

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) 2015/830

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)

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)

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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.

SECTION 16: Other information

Text of phrases referred to under heading 3:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 6: Accidental release measures

SECTION 8: Exposure controls/personal protection

SECTION 11: Toxicological information

SECTION 14: Transport information

SECTION 15: Regulatory information

SECTION 16: Other information

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
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)

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

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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.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

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.

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.

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