

**Safety Data Sheet dated 20/1/2020, version 1**

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

- 1.1. Product identifier  
Trade name: Plantis PQ
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:  
FOR PROFESSIONAL USE
- 1.3. Details of the supplier of the safety data sheet  
Company:  
Esseco S.r.l. Via San Cassiano 99  
28069 - Trecate (NO)  
Italy
- Enartis - Phone n. +39-0321-790300  
Competent person responsible for the safety data sheet: vino@enartis.it
- 1.4. Emergency telephone number  
Enartis - Phone n. +39-0321-790300

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**SECTION 2: Hazards identification**

- 2.1. Classification of the substance or mixture  
EC regulation criteria 1272/2008 (CLP)  
The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).  
Adverse physicochemical, human health and environmental effects:  
No other hazards
- 2.2. Label elements  
The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).  
Hazard pictograms:  
None  
Hazard statements:  
None  
Precautionary statements:  
None  
Special Provisions:  
EUH210 Safety data sheet available on request.  
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

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**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
>= 1% - < 3%	CITRIC ACID	CAS: 77-92-9 EC: 201-069-1 REACH No.: 01-2119457026-42-XXXX	⚠ 3.3/2 Eye Irrit. 2 H319

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.

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

Treatment:

None

#### 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.

##### 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.

#### 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.  
See also section 8 for recommended protective equipment.  
Advice on general occupational hygiene:  
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  
No occupational exposure limit available

DNEL Exposure Limit Values  
N.A.

PNEC Exposure Limit Values  
N.A.

### 8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection.

Suitable material:

UNI EN 420/UNI EN 374

Respiratory protection:

Not needed for normal use.

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

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## **SECTION 9: Physical and chemical properties**

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

Appearance and colour:	Solid
Odour:	Characteristic
Odour threshold:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	N.A.

# Safety Data Sheet

## Plantis PQ

Evaporation rate:	N.A.	
Vapour pressure:	N.A.	
Relative density:	N.A.	
Solubility in water:	N.A.	
Solubility in oil:	N.A.	
Partition coefficient (n-octanol/water):	N.A.	N.A.
Auto-ignition temperature:	N.A.	
Decomposition temperature:	N.A.	
Viscosity:	N.A.	
Explosive properties:	N.A.	
Oxidizing properties:	N.A.	
9.2. Other information		
Miscibility:	N.A.	
Fat Solubility:	N.A.	
Conductivity:	N.A.	
Substance Groups relevant properties	N.A.	N.A.

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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 toxicological effects
  - Toxicological information of the product:
    - Plantis PQ
    - a) acute toxicity
      - Not classified
      - Based on available data, the classification criteria are not met
    - b) skin corrosion/irritation
      - Not classified
      - Based on available data, the classification criteria are not met
    - c) serious eye damage/irritation
      - Not classified
      - Based on available data, the classification criteria are not met
    - d) respiratory or skin sensitisation
      - Not classified
      - Based on available data, the classification criteria are not met
    - e) germ cell mutagenicity
      - Not classified
      - Based on available data, the classification criteria are not met
    - f) carcinogenicity
      - Not classified
      - Based on available data, the classification criteria are not met
    - g) reproductive toxicity
      - Not classified
      - Based on available data, the classification criteria are not met
    - h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

CITRIC ACID - CAS: 77-92-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 11700 mg/kg - Notes: (Citric acid monohydrate)

Test: LD50 - Route: Intraperitoneal - Species: Rat = 725 mg/kg - Notes: (Citric acid monohydrate)

Test: LD50 - Route: Oral - Species: Mouse = 5400 mg/kg - Notes: (Citric acid monohydrate)

Test: LD50 - Route: Intraperitoneal - Species: Mouse = 940 mg/kg - Notes: (Citric acid monohydrate)

Test: LD50 - Route: Intravenous - Species: Mouse = 42 mg/kg - Notes: (Citric acid monohydrate)

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Notes: (Citric acid monohydrate)

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative - Notes: (Citric acid monohydrate)

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Positive - Notes: (Citric acid monohydrate)

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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.

Plantis PQ

Not classified for environmental hazards

Based on available data, the classification criteria are not met

CITRIC ACID - CAS: 77-92-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 440 mg/l - Duration h: 48 - Notes: (Citric acid monohydrate)

Endpoint: LC50 - Species: Daphnia = 1535 mg/l - Duration h: 24 - Notes: (Citric acid monohydrate)

Endpoint: LC50 - Species: Algae = 425 mg/l - Duration h: 168 - Notes: (Citric acid monohydrate)

Endpoint: LC50 - Species: Bacteria > 10000 mg/l - Duration h: 16 - Notes: (Citric acid monohydrate)

### 12.2. Persistence and degradability

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

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

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Recover if possible. In so doing, comply with the local and national regulations currently in force.

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**SECTION 14: Transport information**

- 14.1. UN 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
- 14.6. Special precautions for user  
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
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) 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)
  - 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. 2018/699 (ATP 11 CLP)

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

  - Restrictions related to the product:
    - No restriction.
  - Restrictions related to the substances contained:
    - No restriction.

Where applicable, refer to the following regulatory provisions :

  - Directive 2012/18/EU (Seveso III)
  - Regulation (EC) nr 648/2004 (detergents).
  - 1999/13/EC (VOC directive)
  - 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.
  - Substances for which a Chemical Safety Assessment has been carried out:
    - None

**SECTION 16: Other information**

Full text of phrases referred to in Section 3:  
H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

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.

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.
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.
N.A.:	Not Available
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.