


MATERIAL SAFETY DATA SHEET

 According to Regulation (EC) No. 453/2010 and No. 1272/2008
 Version # 2 of 17/02/2017

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

Product name:	AMINOPOOL®
Product number:	1556
Chemical name:	n.a. is a mixture
INDEX number (listed in Annex VI of CLP):	n.a.
ID number of the C&L inventory:	n.a.
REACH No.:	A registration number is not available for this substance as the substance or its uses are exempt from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. Latest 2018

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

Uses (see section 16) agricultural uses:	Industrial Manufacturing (all) [SU3]. Agriculture [SU1].
Uses advised against:	None.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Importer/Supplier:	Protan Aktiengesellschaft, Runkelsstrasse 38, LI-9495 Triesen
Tel.:	+423 375 15 25
Fax:	+423 375 15 26
E-Mail address:	info@protan.li


1.4 Emergency telephone number

Protan AG:	+423 375 15 25 (office time)
Poison emergency call (24h):	+41 (0)44 251 51 51; (Toxicological Centre in Switzerland). From Switzerland call tel. 145 +49 (0)30 19240 (Gift-Notruf Berlin, EN and DE)

SECTION 2: hazards identification
2.1 Classification of the substance or mixture
Classification in accordance with Regulation 1272/2008 (CLP)

Hazard statement(s):	H319	Causes serious eye irritation.
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2.2 Label elements
Labelling in accordance with Regulation 1272/2008 (CLP)

Hazard pictogram(s):		Warning
Hazard statement(s):	H319	Causes serious eye irritation
Precautionary statement(s):	P280 P305+P351+P338	Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



2.3 Other hazards

PBT/vPvB criteria:	According to Annex XIII of Regulation (EC) No 1907/2006, no PBT and vPvB assessment has been conducted since the mixture is inorganic.
Other hazards:	None known, no additional information available

SECTION 3: Composition/Information on ingredients
3.1 Substances

According to REACH Regulation the product is a mixture of following substances:

Chemical name (Classification)	CAS no.	EC no.	Index no.	Content (w/w %)
Hydrolysed Keratin	069430-36-0	247-001-1	n.a.	≥ 45%
Ammonium Chloride (NH ₄ Cl) (Acute Tox. 4; Eye Irrit. 2; H302, H319)	12125-02-9	235-186-4	017-014-00-8	≤ 40%

SECTION 4: First-aid measures
4.1 Description of first aid measures

General advice:	Seek medical advice if feeling unwell after first aid measures. Show this safety data sheet to the doctor in attendance.
Eye contact:	Immediately wash eyes with plenty of running water for at least 15 minutes. Lift occasionally the upper and lower eyelids. Remove contact lenses if present and easy to do.
Skin contact:	Wash affected skin area with plenty of water and soap thoroughly. Removing contaminated clothing and shoes. Seek medical advice if irritation develops and persists.
Ingestion:	Seek medical advice if concerned person feels unwell. Wash out mouth with plenty of water and give plenty of water to drink. Never give anything by mouth to an unconscious person.
Inhalation:	Remove concerned person from exposure into fresh air immediately if adverse effects occur (e.g. dizziness, drowsiness or respiratory irritation). If not breathing, give artificial respiration or if breathing is difficult, give oxygen and seek medical advice. Do not use mouth-to-mouth respiration. In case of intensive aerosol inhalation, seek medical advice immediately.

4.2 Most important symptoms and effects


Acute effects:	Eye irritation.
Delayed effects:	None known.

4.3 Indication of any immediate medical attention and special treatment needed

n.a.

SECTION 5: Firefighting measures
5.1 Extinguishing media

Suitable media:	Product is not flammable. Use water spray, CO ₂ , alcohol resistant foam, dry chemical, depending on the materials involved in the fire.
Not suitable:	Full water jet.

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5.2 Special hazards arising from the substance or mixture

No direct fire and explosion hazard. Product is not reactive and not flammable. Can emit toxic fumes if involved in a fire: carbon oxide and nitrous vapours, pyrolysis products. Do not breathe-in combustion products.

5.3 Advice for firefighters

Wear self-contained breathing apparatus. Wear full protective suit.

5.4 Further information

Dispose of fire residues and contaminated firefighting water in accordance with official regulations.

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures

Avoid creating dusty conditions and prevent wind dispersal. Ensure adequate ventilation. Avoid contact with eyes, skin, and clothing. Use suitable protective equipment against the effects of dust. Use proper equipment as indicated in section 8.

6.2 Environmental precautions

Prevent the material from entering surface water or sanitary sewer system. Do not discharge directly to a water source. If accidental spillage or washings enter drains or watercourses contact local authority.

6.3 Methods and material for containment and cleaning up

Prevent formation of dust clouds, damp down dust with water spray. Vacuum or sweep up mechanically and place into suitable labelled containers for recovery or disposal. Clean up affected area and materials involved with a large amount of water. Wipe away residual trace is possible.

6.4 Reference to other sections

For emergency contact info:	section 1
For personal protection:	section 8
For disposal:	section 13

SECTION 7: Handling and storage
7.1 Precautions for safe handling


Technical measures/precautions: Avoid contact with eyes, skin and clothing. Avoid creating dust conditions and prevent wind dispersal. Keep away from moisture. Dissolve and stir the product always into standing water. Keep containers tightly sealed. Ensure good ventilation/exhaustion at the workplace.

General occupation hygiene: Do not eat, drink or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and containers: Store in a cool, dry and well-ventilated place. Keep dry in closed original packaging. Do not store in open or unlabelled packaging. Avoid possibility of bag falls or handling damages.

Incompatible products: Do not store together with reducing agents, heavy-metal compounds, acids and alkalis. Store separately from food and animal feed.

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SECTION 8: Exposure controls / personal protection
8.1 Control parameters
Regulated occupational exposure limit values:

Recommended occupational, consumer and environmental exposure limit values:	TWA (short term): 3 mg/m ³ Long term: 1 mg/m ³
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8.2 Exposure controls

Handle in accordance with good industrial hygiene practice and the usual precautionary measures for handling chemicals. Ensure good ventilation in the workplace through effective local aspiration or ventilation. In addition, an eyewash facility and a safety shower for facilities storing or utilizing this material is good industrial practice.

Personal protective equipment:


- Respiratory protection:	AX Filter recommended for short-term use. For long-term exposure, use type P1 (EN 143) Respiratory protection.
- Hand protection:	Protective gloves (EN374); impermeable material resistant to product.
- Eye protection:	Safety glasses with side-shields conforming (EN166)
- Skin and body protection:	Lightweight protective clothing. Dust proof work clothing recommended for long-term exposure.
- Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Use appropriate techniques to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties

Appearance, form:	powder	Vapour pressure	not determined
Appearance, colour:	beige, brown	Vapour density	not determined
Odour	n.a.	Relative density:	600 – 650 kg/m ³
Odour threshold	not determined	Solubility in water:	soluble
pH value at 20°C (1:10 solution)	3,5 – 4,5	Partition coefficient: n-octanol/water	not determined
Melting- /freezing point		Auto-ignition temperature	not determined
Initial boiling point and boiling range:	Not relevant as the substance is an inorganic solid.	Decomposition temperature	not determined
Flash-point:	n.a.	Viscosity (dynamic at 20°C)	not applicable
Evaporation rate	no data available	Explosive properties	not determined
Flammability (solid, gas)	not self-igniting	Oxidizing properties	not determined
Upper/lower flammability or explosive limits	no data available		

9.2 Other information

Not available

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SECTION 10: Stability and reactivity
10.1 Reactivity

Stable under recommended storage and handling conditions (see section 7, handling and storage).

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7, handling and storage).

10.3 Possibility of hazardous reactions

n.a.

10.4 Conditions to avoid

Heating, contact with alkalis. Exposure to moisture may affect product quality

10.5 Incompatible materials

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products are not expected.

SECTION 11: Toxicological information
11.1 Information on toxicological effects
Acute toxicity:

Acute oral toxicity: (calculated)	LD ₅₀ : >3600 mg/kg bw
Acute dermal toxicity:	n.a.
Acute inhalation toxicity:	n.a.

Local effects

Skin irritation:	No irritation
Eye irritation:	Irritating
Skin sensitization:	Not sensitizing

Other

Sub-acute toxicity:	Negative
Mutagenicity:	Negative
Reproductive toxicity:	Negative
Carcinogenicity:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Additional information	RTECS No. not available. The product is free of pathogens in accord with 1999/129/EC. For our experience and information, the product does not have adverse health effects if handled and used according to specifications. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTOR 12: Ecological information
12.1 Toxicity

Fish (short-term):	LC50: 209 mg/l (Cyprinus carpio, 96h)
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(Ammonium chloride)	LC50 3,98 mg/l (Oncorhynchus mykiss, 96 h) NOEC 57 mg/l (Oncorhynchus mykiss, 96 h)
Fish (long-term):	n.d.
Daphnia magna (short-term):	LC50: 161 mg/l (48h) (Ammonium chloride)
Daphnia magna (long-term):	Growth inhibition NOEC - 0,1 mg/l - 216 h
Algae:	n.d.

12.2 Persistence and degradability

Biodegradation: n.d.

12.3 Bioaccumulative potential

Octanol-water partition coefficient (K_{ow}): n.d.

12.4 Mobility in soil

Adsorption coefficient : n.d.

12.5 Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No 1907/2006, no PBT and vPvB assessment has been conducted

SECTOR 13: Disposal considerations
Waste treatment methods

Waste from residues: Follow the local regulations for the disposal and dispose through a licensed disposal company. Handle in accordance with good industrial hygiene practice and the usual precautionary measures for handling chemicals.

“European Waste Catalogue and Hazardous Waste List” classification:
 2000/532/EC 02 00 00 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
 2001/118/EC 02 01 00 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
 2001/119/EC
 2001/537/EC

Container: Containers should be cleaned by appropriate method and then re-used or disposed in accordance with local and national regulations. Do not remove label until container is thoroughly cleaned. Dispose container as unused product

SECTOR 14: Transport information

The product is not dangerous with respect to the scope of application of the regulations concerning the transport of dangerous goods by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

SECTOR 15: Regulatory information
15.1 Safety, health and environmental regulation specific for the substance or mixture

Hazardous substance or mixture according to Regulation (EC) No. 1272/2008 (Regulation on classification, labelling and packaging of substances and mixtures).

Classification in accordance with Regulation 1272/2008, as listed in Annex VI: None.

Classification in accordance with Regulation 1272/2008, by self-classification.



AMINOPOOL® is conform to the following regulations: Regulation (EC) No. 1069/2009 laying down health rules concerning animal by-products not intended for human consumption. This safety data sheet complies with the requirements of Article 31 of EC Regulation 1907/2006/EC (REACH regulation) and the information contained herein is displayed in the order prescribed in Annex II to that regulation as amended in the year 2010 (435/2010/EC). The purpose of this safety data sheet is to facilitate the carrying out of a risk assessment. We remind employers of their duty to carry out such an assessment and subsequently to provide an appropriate working environment. It is the employer's duty to procure all necessary personal protective equipment and ensure that all workers handling the product use such equipment.

15.2 Chemical safety assessment

No chemical safety assessment available.

SECTOR 16: OTHER INFORMATION

Changes since last issue:	New release
General bibliography	Regulation (EC) 453/2010/EC of the European Parliament amending Regulation 1907/2006/EC (REACH). Regulation (EC) 1272/2008 (CPL) Safety Data Sheets provided by suppliers of component substances. Regulation (EC) No. 1069/2009 laying down health rules concerning animal by-products not intended for human consumption.
Abbreviations:	TLV-TWA: Threshold limit value - Time weighted average n.a: not available n.d.: not defined
Safety data sheet created/revised by:	SILC FERTILIZZANTI SRL – Via delle Acque, 43 – 48124 Ravenna
Safety data sheet contact person:	Protan AG, Christian DOBERS, Tel. Nr. +423 375 15 25

Legal notice

This Material Safety Data Sheet (MSDS) is additional to the Technical Data Sheet (TDS) but does not replace it. The MSDS contains guidance on the safe handling, use, processing, storage, transportation and disposal of the product. This document relates to the original product AMINOPOOL®. It may not be valid for the formulation or combination with other materials or in any process. The original product is developed and tested for the specified uses and should not be used for any other purposes. Any other use may involve risks. The user will take sole responsibility for the precautions relating to the use of the product. The information in this MSDS is applicable to the product with regard to appropriate safety precautions and is not intended to guarantee any particular properties.

This document is not to be considered a warranty or quality specification. The information in this document relies on the recommendation of the EFMA form (European Fertilizer Manufacturer's Association). The information does not pretend to be all-inclusive and is given to the best of our knowledge at the date of publication. Protan AG does shall not be held liable for any damage resulting from unsafe handling of the product.

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