


MATERIAL SAFETY DATA SHEET

 According to Regulation (EC) No. 1907/2006 and No. 1272/2008
 Version #1 of 25/01/2015
 GENERIC EU MSDS – NO COUNTRY SPECIFIC DATA

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

Product name	BIO-PROTAN®NPK 9-0-16
Product number	1129
Brand of	Protan AG
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.

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

Identified uses:	Industrial manufacturing (all) [SU3]. Agriculture, forestry, fishery [SU1]
Uses advised against:	Do not use for purposes other than those listed

1.3 Details of the supplier of the safety data sheet

Company	Protan Aktiengesellschaft, Runkelstrasse 38, LI-9495 Triesen
Phone	+423 375 15 25
Fax	+423 375 15 26
Email address	info@protan.li

1.4 Emergency telephone number

Protan AG	+423 375 15 25 (working hours)
Poison emergency call (24h)	+41 (0)44 251 51 51 or 145 (Centre Suisse d'Information Toxicologique), From Switzerland call tel. 145 +49 (0)30 19240 (Gift-Notruf Berlin, language EN and DE)

SECTION 2: Hazards identification
2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to European Regulation (EC) 1272/2008 (CLP) and subsequent amendments.

2.2 Label elements

The product is not subject to any labelling obligation/classification according to Directive 1272/2008/EC.

2.3 Other hazards

PBT/ vPvB criteria:	PBT and vPvB assessment not applicable
Other hazards:	No additional information available

SECTION 3: Composition/Information on ingredients
3.1 Substances

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3.2 Mixture

Natural polymer (amino acids and peptides) modified by chemical hydrolysis and mixed with Potassium Sulphate (CAS-No.: 7778-80-5; EC-No.: 231-915-5)

Type of formulation: water soluble powder fertilizer



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

General	If feeling unwell after first aid measures, seek medical advice.
If inhaled	May cause a slight irritation of the respiratory tract if exposed to high concentrations. Dry/sore throat. Coughing. Respiratory difficulties. If breathed in, move person to fresh air. If not breathing, give artificial respiration
In case of skin contact	Wash off with soap and running water.
In case of eye contact	Flush eyes with running water. Remove contact lenses if possible. Continue rinsing.
If swallowed/ingested	Rinse mouth with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Fine and hygroscopic powder may cause a mild respiratory and eye irritation. The most important known symptoms and effects are described in section 2.2 (labelling) and section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Normally no need of immediate special treatments. Treat according to symptoms.

SECTION 5: Firefighting measures
5.1 Extinguishing media

Product is not flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use standard firefighting media depending on the materials involved in the fire.

5.2 Special hazards arising from the substance or mixture

Product is not reactive and not flammable. Decomposing materials: sulphur oxides, potassium oxides and carbon oxides.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

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


Always ensure your own safety first. Ensure adequate air ventilation and avoid dust formation. Do not breathe in product dust and avoid product contact with eyes. For personal protection see section 8.

6.2 Environmental precautions

Not dangerous material. No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Recover the product for removal or reuse. Sweep up and shovel. Keep in suitable, labelled and closed container or bags for disposal. After wiping up, wash with water the area and materials involved.

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6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. No special precautions required when you use and process the product for the identified purpose (see section 1.2. and section 2.2). Handle in accordance with good industrial hygiene practice and observe general safety regulations for handling chemicals.

Technical measures/precautions:	Product is a hygroscopic powder. When diluting, do <u>not</u> stir the product into standing water. Do <u>not</u> pour all at once to avoid airborne dust.
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7.2 Conditions for safe storage, including any incompatibilities

Technical measures/storage conditions:	Normal storage conditions without particular incompatibilities. Keep <u>dry</u> in <u>closed</u> original packaging. Do not store in open or unlabelled packaging. Avoiding possibility of bag falls or handling damages.
Storage compatibility	Store separately from food and animal feed.
Additional disclosures on stock conditions	Store in a cool, dry and well-ventilated place.
Storage class	Non combustible powder.
Classification according Regulation 2009/104/EEC	-

7.3 Specific end use(s)

Not dangerous fertilizer. Apart from the uses mentioned in section 1.2. no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters


The product does not contain any relevant quantities of materials with critical value limits to monitor. Apply general workplace control parameters. If airborne dust is generated in closed areas, use local exhaust ventilation controls. Assess exposure and keep airborne dust level below recommended limits. No further information apart from section 7.

8.2 Exposure controls

Handle in accordance with good industrial hygiene practice and the usual precautionary measures for handling chemicals.

Personal protective equipment:	Product is not a hazardous substance. Nevertheless, avoid contact with eyes and prolonged contact with skin to prevent any irritation. In case of prolonged contact, wear protective clothing, goggles, gloves and respiratory protection against product typical airborne dust.
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- Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Hand protection	Product does not require the use of chemical resistant gloves. Inspect gloves prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. In case of repeated and prolonged contact, wear gloves. For full and splash contact we advise the use of "Nitrile Rubber Gloves (NBR)", minimum layer thickness of 0.11 mm.
- Skin and body protection	Dust proof work clothing recommended for long-term exposure. Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Respiratory protection	Respiratory protection is not required. For long-term exposure and where protection from nuisance levels of dust are desired, use type P1 (EN 143) dust mask. Use components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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	characteristic	Relative density	350 - 400 kg/m ³
Odour threshold	not determined	Water solubility(ies)	soluble
pH value at 20°C (1:10 solution)	5,5 – 6,5	Partition coefficient: n-octanol/water	not determined
Melting / freezing point	not determined	Auto-ignition temperature	not determined
Initial boiling point and boiling range	not available	Decomposition temperature	not determined
Flash point	not available	Viscosity (dynamic at 20°C)	n.a.
Evaporation rate	not available	Explosive properties	not determined
Flammability (solid, gas)	not self-igniting	Oxidising properties	not determined
Upper/lower flammability or explosive limits	not determined	Vapour pressure	not determined

9.2 Other safety information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.



10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Close packaging after use. Do not store under moist conditions.

10.5 Incompatible materials

Strong oxidant agents like oxidants mineral acids, organic peroxides, organic water peroxides, elementary metals. Apply cautiously in combination with copper, mineral oil based products and sulphur products.

10.6 Hazardous decomposition products

In the event of fire refer to section 5.

SECTION 11: Toxicological information
11.1 Information on toxicological effects

Acute toxicity	For pure Potassium Sulphate: LD50 Oral - Rat - 6.600 mg/kg
Skin corrosion/irritation	no data available
Serious eye damage or irritation	no data available
Respiratory or skin sensitisation	no data available
Germ cell mutagenicity	no data available
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.
Reproductive toxicity	no data available
Specific target organ toxicity - single exposure	no data available
Specific target organ toxicity - repeated exposure	no data available
Aspiration hazard	no data available
Additional information	RTECS No. for pure Potassium Sulphate: TT5900000. The product is free of pathogens in accordance with 1999/129/EC. The product is not subject to classification according to 1272/2008/EC (GHS regulation). 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.

SECTION 12: Ecological information
12.1 Toxicity

The product is a fertilizer and does not cause adverse effects in the environment if used according to the advised dosages and recommendations of use. Low concentrations discharged correctly into adapted biological sewage treatment plants do not interfere with degradation activity of activated sludge.

12.2 Persistence and degradability

The organic substances contained in the product are completely biodegradable.



12.3 Bio accumulative potential

No bioaccumulation or bio magnifications expected based on substance properties.

12.4 Mobility in the soil

Product is water-soluble. It can contaminate ground and surface waters if used in large quantities. Handle in accordance with good industrial hygiene and safety practice in order to prevent the spread of concentrate product and penetration into the soil and surface waters.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available. Chemical safety assessment not required/not carried out.

12.6 Other adverse effects

Generally not hazardous for water. No further relevant data available.

SECTION 13: Disposal considerations
13.1 Waste treatment methods

Unused product	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product

SECTION 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).

SECTION 15: Regulatory information

Not hazardous substance or mixture according to Regulation (EC) 1272/2008 (CLP).

BIO-PROTAN® NPK 9-0-16 is produced and marketed according to the following regulations:

Regulation (EC) No. 1069/2009 laying down health rules concerning animal by-products not intended for human consumption and Regulation (EC) No. 889/2008 laying down detailed rules for the implementation of Regulation (EC) No. 834/2007 (Organic production and labelling of organic products with regard to organic production, labelling and controls).

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.

15.1 Safety, health, and environmental regulation specific for the substance or mixture

Restrictions in relation to the product or contained substances pursuant to Annex XVII to Regulation (CE) 1907/2006	None
Substances in candidate list (Art 59 REACH)	None
Substances subject to authorization (Annex XIV)	None



Sanitary control

Workers exposed to chemicals are subject to the control of health authorities following the national and local regulations.

15.2 Chemical safety assessment

No chemical safety assessment required or carried out by the supplier of the product. This substance is classified as non-hazardous according to Regulation (EC) 1272/2008 (CLP).

SECTION 16: Other information

Changes since last issue	New release
Safety data sheet contact person	Protan AG, Christian DOBERS, phone no. +423 375 15 25
General bibliography	Regulation (EC) 453/2010/EC of the European Parliament amending Regulation 1907/2006/EC (REACH) Regulation (EC) 1107/2009 (CLP) Regulation (EC) 790/2009 (I apt. CLP) Regulation (EC) 1272/2008 (CPL) Safety Data Sheets provided by suppliers of component substances.
Abbreviations and acronyms	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulations Concerning the International Transport of Dangerous Goods by Rail IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association ICAO: International Civil Aviation Organization GHS: Globally Harmonized System of Classification and Labelling of Chemicals RTECS: Registry of Toxic Effects of Chemical Substances REACH: Registration, Evaluation, and Authorisation of Chemicals CLP: Classification, Labelling and Packaging

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 BIO-PROTAN® NPK 9-0-16. 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 use 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 is reproduced according to 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 not accept any liability with regard to the contents of this document and shall not be held liable for any damage resulting from unsafe handling or from contact with the product.

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