



VEGANOSOL
BIOLOGISCHER VOLLDÜNGER



V² - Vital Vegan

Organischer Flüssig- und Spurenelementdünger
mit **Oberflächenhaftwirkung**



VEGANOFLUID
BIOLOGISCHER FLÜSSIGDÜNGER



**VEGAN & ORGANIC
FERTILIZERS**



We're going in a new direction....



Photo: pxhere

VEGANOSOL - a sustainable solution for the future!

Sustainability is the order of the day!

Sportsturf, especially golf courses, are quickly becoming the focus of critical public opinion, media and environmentalists, who point out excessive water consumption and use of chemicals like herbicides and pesticides and their impact on environment.

VEGANOSOL company is dedicated to those issues and constantly develops products that are in full accordance with environmental awareness and human health. By using our products greenkeepers and course managers can respect nature AND can reach highest quality levels, health and perfect appearance of their sportsturf.

It's all about saving water without decreasing essential nutrients to the plants, applying granular fertilizers without endangering groundwater with synthetic nitrate, applying liquid fertilizers without running into danger of hazardous drift into neighboring vegetation or residential areas, as well as protect the user themselves; all while consistently supplying the plants all necessary nutrients and trace elements for healthy growth and appearance.

Numerous key users of VEGANOSOL already prove day by day that intensive grounds care and sustainability don't necessarily have to be in conflict. Let's be prepared to leave the accustomed paths, be ready for a new approach to turf care and a sustainable mindset! Mother nature and your customers will be thankful for that!

Facts on VEGANOSOL:



FULL ORGANIC N-P-K FERTILIZER



100% ORGANIC AND VEGAN

granular fertilizer made of pure vegan components and 100% GMO free production.



NO QUESTIONABLE INGREDIENTS

of animal origin (horn shavings from overseas, slaughterhouse waste from factory farming etc.) or traces of chemicals such as antibiotics that may be found in other organic fertilizers containing animal by-products.



UNDERGROUND OR ON THE SURFACE

VEGANOSOL continuously and with long-term effect supports the plant's health and growth.



NO GROUNDWATER CONTAMINATION

and soil overload with mineralic salts like at use of synthetically produced N-P-K fertilizers, that can be washed out to neighbouring biotopes and groundwater.



NATURAL, NON TOXICOLOGICAL

components allow instant play after application without danger of getting in contact with hazardous substances.



We're going in a new direction



Photo: Harald Faldner

VEGANOSOL FOR GROUND INSTALLATION - the perfect support for your turf

Perfect balance!

One of the key factors for perfect growth of plants is the composition of their rootzone. Especially on sports turf, it consists mainly of sand and shows itself as a rather sterile environment. Roots, however, need vivid interaction with microorganisms that supply nutrients. These microorganisms on the other hand are partly fed by the roots, like bait to stay in their vicinity. Roots „breed“ those microorganisms that are useful for them and of which they expect essential supply of nutrients and trace elements, as well as powerful support against possible threatening diseases.

Another key factor is water supply. Water shall not be bound on the surface by excessive thatch, nor shall it percolate too fast into lower non root-containing layers, preventing the plants from nutrients supply and causing weak growth and even dry patches.

VEGANOSOL - directly installed into the ground while aerating and topdressing - effectively helps to gain a perfect balance of water holding and draining capacity. Its components, like natural amino acids, stimulate and feed soil life, which keep this balance. More vivid microorganisms also contribute to a faster and more effective natural long-term thatch removal and thus to an essentially improved water and nutrient supply to the key-rootzone.

Advantages of VEGANOSOL:

-  **ENHANCES THATCH REDUCTION**
through increased activity of microorganisms.
-  **PERFECT WATER HOLDING CAPACITY**
in the rhizosphere ensures sufficient moisture and nutrient reserve for the roots any time, but without excessive or unwanted growth.
-  **NO WASHOUT RISKS**
and no danger for ground water and environment.
-  **RICH ESSENTIAL AMINO ACIDS**
and trace-elements in VEGANOSOL feed the plant beyond common N-P-K fertilizer based supply.
-  **HIGHER DISEASE RESISTANCE**
like against snow mold, dollar spot etc. by strenghtening the plant's immune system.
-  **EFFECTIVE AGAINST DRY SPOTS**
through enhanced water holding capacity. VEGANOSOL counteracts water repellency and high percolation rates in poor or sandy soil.
-  **CERTIFIED FOR ORGANIC FARMING**
is a proof for sustainability and ecological aptitude.



We're going in a new direction

VEGANOSOL FOR GROUND INSTALLATION - that's how you do best!

1. Mowing



Photo: Harald Stückler

Clippings should be collected or blown off.

4. Brushing



Photo: Harald Faldner

Brush in VEGANOSOL before topdressing in order to evenly distribute the granules into the aeration holes.

2. Aerating



Photo: Harald Stückler

With hollow tines at ca. 10 cm depth. Collect and remove the cores.

5. Topdressing



Photo: Harald Stückler

Topdress best with dry silica sand.

3. Application of VEGANOSOL



Photo: Harald Faldner

Evenly distribute approx. 200g/m² VEGANOSOL by using an appropriate topdresser or spreader.

6. Brushing



Photo: Harald Stückler

Brush in the sand until the aeration holes are filled up completely. Remove surplus sand with blowers.



We're going in a new direction



Photo: Harald Faldner



VEGANOSOL - makes renovation works more effective!

VEGANOSOL and turf rolls

Before the installation of turf rolls it is recommended to mix approximately **200–250 g/m²** of VEGANOSOL - depending on the soil quality - into the ground to create perfect growing conditions.

VEGANOSOL and seeding

In the course of a new seeding it is helpful to mix approximately **200–250 g/m²** of VEGANOSOL into the prepared soil or to evenly distribute the same quantity simply on the leveled surface.

VEGANOSOL acts as a soil activator

Its composition makes VEGANOSOL act like power food for the microorganisms that can turn - with time - even poor and sandy soils into a favorable growing environment, full of soil-life. VEGANOSOL is not a pure short term N-P-K fertilizer like many others, causing fast growth with relatively rapid decline of effectiveness, but is a long-term fertilizer with a powerful soil-activating function for constant and even growth of the plants.



Photo: Harald Stückler

Benefits of VEGANOSOL:



VEGANOSOL as SOIL ACTIVATOR

activates microorganisms even at rather sterile and sand-based conditions, which ensure a perfect growing environment in the rootzones.



NO EXTRA APPLICATION

of soil activators through implication in VEGANOSOL results in savings of time and money.



OPTIMUM WATER HOLDING CAPACITY

VEGANOSOL is much less at risk for washouts than mineral fertilizers, eliminating the risk of contamination to ground and neighboring water.



REAL LONG-TERM EFFECT

due to its water holding capacity nutrients like rich amino acids remain efficiently longer in the rootzone and consistently supply what the plants really need.

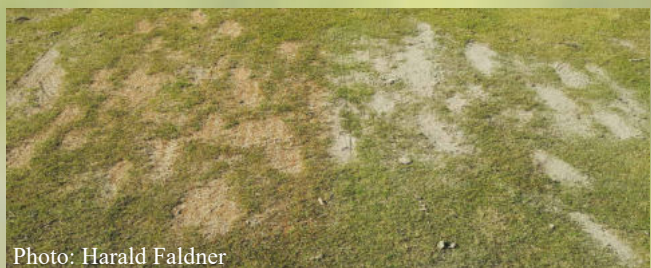


Photo: Harald Faldner



We're going in a new direction

PRODUCT DATA SHEET – Organic Fertilizer

Base Material: Distillers grains (DDGS grains) with leftover molasses, PNC, CSL in various concentrations.

Product Description

Distillers grains: By-product of distilling grains (wheat, corn, triticale and other sugary grains) and drying the leftover material. Contains yeast.

Leftover molasses: During the process of removing the sugar, molasses is divided by a chemical process into fractions. The leftover molasses is low in sugar.

PNC (Potato-Nitrogen-Concentrate): Nitrogen-rich by-product of removing starch.

CSL (corn steep liquor): By-product created by extracting corn starch as a mineral-rich suspension

Standard Values

Organic substance in relation to dry mass.....	90 %
Total Nitrogen N	5,5%
Total Phosphorous (P ₂ O ₅ total)	2,5 %
Total Potassium Oxide (K ₂ O total)	1,5 %
Bulk weight	550 g/l
Water content	12 %
Crude ash.....	6 %
Calcium Oxide (CaO)	0,15 %
Magnesium Oxide (MgO)	0,6 %
Sodium Oxide (NaO)	1 %
Chloride-free	< 0,5 %

The analysis values are subject to natural variations are therefore only to be used as benchmarks.

Undesirable Substances Found During Risk-Oriented Self-Inspection

Adherence to the applicable limits in accordance with Fertilization VO 2004 idgF is controlled at set intervals.

Details on Storage and Transport

Store cool and dry; Delivery form: fine and coarse granular, pellets in various packing units.

Use and Operational Area

For use in agriculture as well as in cultivation of vegetables, fruits, and horticulture. Suitable for organic farming. In the expenditure calculation, the corresponding guidelines for proper fertilization are to be adhered to according to the Committee for Soil Fertility and Protection (BMLFWU).

Caution

Veganosol is non-toxic, biodegradable, and does not require special safety measures during transport. However, there is a risk of dust explosion.

Customs tariff number: 3101 00 00

The product corresponds to the fertilizer guidelines 2004, BGBl. II Nr. 100/04 idgF.

All values and notes are based on our research and should be understood as general recommendations and precautions. We recommend verifying suitability of our products through your own testing.

Distributor

VEGANOSOL GmbH., Gewerbering 14, D-84359 Simbach/Inn; www.veganosol.com



We're going in a new direction



Photo: Harald Stückler

VEGANOFLUID - The Power of BETAINE

Strengthen the plant from inside!

Sports turf can suffer from many different stress factors. Environmentally, caused by drought, cold and heat periods, or man-made, caused by frequent and excessive use of chemicals, daily cutting, constant low heights of cut or simply heavy use by players.

VEGANOFLUID is a organic-biological liquid fertilizer for foliar application and can efficiently counteract negative reactions of the plants to stressors and make them more tolerable to them. A key component of **VEGANOFLUID** is a high dose of **BETAINE**, a valuable substance produced from sugar beet.

Betaine is the key!

BETAINE and the accompanying amino acids act as a powerful osmosis regulator for the plants. **VEGANOFLUID** optimizes the regulation of the osmotic pressure inside the cells by keeping it at optimum level even in periods of increased stress for the plants. It also reinforces the cells cores as well as their walls and makes the plants more resistant to diseases. **BETAINE** can be quickly absorbed through the leaves and is distributed throughout the whole plant. Plants treated with **VEGANOFLUID** are therefore able to adapt to changing weather conditions and to counteract negative influences within mostly 24-48 hours after application.

Application on sports turf:



SMALL-MOLECULE STRUCTURES

of Betaine enable **VEGANOFLUID** to be absorbed by the plants without a major gap opening and the risk of penetration of pathogens. Efficient nutrients supply plants while removing that risk.



RICH AMINO ACIDS

as a key component of **VEGANOFLUID** strengthen the plants, increase their resilience and activate their self-healing capacities.



VEGANOFLUID AS FOLIAR APPLICATION

is absorbed by the leaf within max. 48 hours and unfolds its full impact on cells throughout the plant.



NO WASTE

of washed away fertilizers. **VEGANOFLUID** that is not absorbed by the leaves and being washed down by rain or irrigation feeds the plant through its rootzone.



INTERVALS

of application approximately every 4 weeks (at normal weather conditions) have proven to be perfect. Otherwise apply by demand latest 48 hours before an expected heavy stress situation for the plants.



We're going in a new direction

APPLICATION OF VEGANOFLUID - for a healthy sports turf

1. Choose perfect time

- * Preferably early morning or late evening
- * The grass should be dry
- * Avoid direct sunlight and extreme heat (>28°)

2. Determine application rate

- Water approx. 400 – 1.000 l/ha
- Per ha: 15 – 20 l VEGANOFLUID
+ 5 – 10 l V²-VITAL VEGAN

3. Choose nozzle



Photo: Harald Stückler

The finer the better. Preferably twin-jet nozzles.

4. Fill tank and mix it



Photo: Harald Stückler

Fill up tank to 1/3 with clean water, then add **VEGANOFLUID** in a mixture with **V²-VITAL VEGAN** in the recommended ratio. **Shake the containers of VEGANOFLUID and V²-VITAL VEGAN well before adding!**

Then fill up the tank with clean water until the recommended volume is reached. Stir with a stick or activate the agitation of the tank (if available).

5. Application



Photo: Harald Stückler

Reception of **VEGANOFLUID** starts approximately 2 hours after application (depending on temperature and humidity at time of application). Surplus liquid will be washed into the soil by rain or irrigation and affects the rootzone.

6. Clean tank and nozzles

Drain water is not hazardous.

Advantages of VEGANOFLUID:



STRENGTHENS IMMUNE SYSTEM

of the plants and provides a slight fungicidal effect. Minimum necessary gap opening due to small-molecule structure minimizes disease penetration.



KEY OSMO-REGULATOR

ensures constantly optimum cell pressure and health.



RESILIENCE TO STRESS SITUATIONS

like frost, heat, drought, excess water and mechanical actions such as frequent cutting, players traffic etc.



QUICK ABSORPTION

of nutrients beginning approximately 2 hours after application. Full efficiency is gained within 24-48 hours.



PERFECT MISCIBILITY

with **V²-VITAL VEGAN**;
Per ha approx. 5-10 liter **V²-VITAL VEGAN** and
15-20 liter **VEGANOFLUID** in 400-1.000 liter water.



MIXABLE WITH OTHER PRODUCTS*

to enhance and accelerate their effectiveness.

* Not mixable with silicium due to risk of flocculation.

* Always try on a test area before fully applying.

We're going in a new direction

PRODUCT DATA SHEET VEGANOFLUID - Organic liquid fertilizer

Material: Partly desugared beet molasses with thin stillage

Product Description

A mixture of by-products resulting from production of sugar through ion exclusion and from alcohol production through distillation of mash (wheat, corn, triticale, barley)

Appearance: dark brown, liquid

Smell: characteristic, no foreign smell

Manufacturing Process

Partly desugared beet molasses: Beet molasses is diluted with condensat (water). Through filtration and chromatographic separation of diluted molasses the Betain-fraction is extracted. Accumulation of Betains through heating process and evaporation.

Thin stillage (Syrup): Milled grains are processed thermally and enzymatically in a starch digestion. In the subsequent fermentation process the released sugar is transformed by yeast into alcohol. The alcohol of the mash is removed by distillation. The remaining stillage finally undergoes a centrifuging process.

Standard values

Dry mass	48,4%
Organic substances in relation to dry mass	89,0%
Total Nitrogen N	5,1%
Total Phosphorus (P ₂ O ₅ total)	0,2%
Potassium Oxide (K ₂ O total)	0,7%
Calcium Oxide(CaO)	<0,1%
Magnesium Oxide(MgO)	0,05%
Natrium Oxide(Na ₂ O)	0,7 %
ph-value	8,9

The analysis values are subject to natural variations are therefore only to be used as benchmarks.

Undesirable Substances Found During Risk-Oriented Self-Inspection

Adherence to the applicable limits in accordance with Fertilization VO 2004 idgF is controlled at set intervals.

Details on Storage and Transport

Store cool and dry; avoid frost. Keep away from beverages, foodstuff and animal feed.

Store out of reach from children, pets and non authorized persons.

12 x 1 liter bottles, 5 liter and 20 liter canister, 1000 liter IBC container

Use and Operational Area

Foliar application is generally done in supplementary to granular fertilizing and quickly provides plants with organic Nitrogen of plant-based material.

An application 48 hours prior to dry and heat periods reduces water loss from leaves by transpiration.

Caution

Ensure for good ventilation while handling to avoid aerosols. It is recommended to wear safety goggles, dusk mask and gloves. In case of contact with skin or eyes flush with water only. Customs tariff number: 2309 90 96 90

The article corresponds to the fertilizer guidelines 2004, BGBl. II Nr. 100/04 idgF.

All values and notes are based on our research and should be understood as general recommendations and precautions. We recommend verifying suitability of our products through your own testing.

Distributor / Manufacturer

VEGANOSOL GmbH., Gewerbering 14, D-84359 Simbach/Inn

We´re going in a new direction

We´re going in a new direction





Photo: Harald Stücker

V²-VITAL VEGAN - for perfect adhesive power

Better adhesion - better impact!

Due to its base product (thick-stillage) V²-VITAL VEGAN proves especially efficient when it comes to adhesiveness to plants. A combination with VEGANOFLUID reinforces the effectiveness of both. V²-VITAL VEGAN also can be mixed with all common liquid fertilizers, liquid plant protection products and herbicides. In accompaniment with V²-VITAL VEGAN they will be absorbed by the plants much quicker than usual or when used separately.

Rich in essential amino acids

Because of its pure plant based raw material V²-VITAL VEGAN - as a 100% organic and trace elements fertilizer - is also rich in natural amino acids. They are responsible for construction and quality of proteins and turned out to be a key factor for a healthy growth. When there is water and enough amino acids available for the roots, plants might grow even without any synthetic and environmentally questionable fertilizers.

Test it before!

Before application on the main area, it is recommended to run a test of the according mixture on a small and non critical test area. Please wait 24 hours after application for reaction of the plants.

V²-VITAL VEGAN on Sports Turf :



ORGANIC NITROGEN AND POTASSIUM

- instead of synthetically manufactured - feed the plants without any environmental issues.



QUALITY TRACE ELEMENTS

ensure additional growth and health.



RECOMMENDED MIX-RATIO per ha

With water: approx. 5-10 Liter at 1:40;

With VEGANOFLUID: 5-10 liter V²-VITAL VEGAN and 15-20 liter VEGANOFLUID in 400-1.000 Liter water.



PERFECT MISCIBILITY

with VEGANOFLUID; As well with all common fungicides, herbicides and growth regulators.



INCREASED AND QUICKER RECEPTION

of mix partners through direct transport into the cells.



RICH IN NATURAL POTASSIUM

which is necessary for plants to build up healthy and resistant cell walls. Also aids in the perfect regulation of water and the metabolic processes of the plants in general.



We're going in a new direction



Organischer Flüssig- und Spurenelementdünger
mit **Oberflächenhaftwirkung**

PRODUCT DATA SHEET - organic fertilizer for foliar application

Base Material: Vinasse and thick stillage

Product Description

Vinasse:

Contains thickened leftovers of alcohol fermentation while sugar processing (min 90%) and corn (max. 10%). Contains also devitalized yeast cell mass (*Saccharomyces Cerevisiae*).

Appearance: Viscous, dark brown liquid, tends to sedimentation.

Thick stillage:

By-product from alcohol processing through distillation of mash (wheat, corn, triticale, barley and other sugar containing materials) and through separation of undissolved solid matter. Contains yeast bio mass.

Standard values

Dry mass	49,2%
Organic substances in relation to dry mass	70,3%
Total Nitrogen N	7,2%
Total Phosphorus (P ₂ O ₅ total)	1,13%
Potassium Oxide (K ₂ O total)	7,51%
Calcium Oxide(CaO)	0,14%
Magnesium Oxide(MgO)	0,6%
Natrium Oxide(Na ₂ O)	1,12 %
Water soluble Chloride	0,72 %

The analysis values are subject to natural variations are therefore only to be used as benchmarks.

Durability and Storage

24 months; Store cool and dry; avoid frost. Keep away from beverages, foodstuff and animal feed.

Store out of reach from children, pets and non authorized persons.

12 x 1 liter bottles, 5 liter and 20 liter canister, 1000 liter IBC canister

Use and Operational Area

Application in agriculture, cultivation of vegetables, fruits and horticulture.

In regard of application rates please refer to the applicable legal guidelines for proper fertilization in your country.

Caution

Vinasse and thick stillage are non toxic and biodegradable. No special safety precautions are necessary while handling and transport. In case of contact with skin or eyes flush with water only.

Custom tariff number

2308 00 90

The article corresponds to the fertilizer guidelines 2004, BGBl. II Nr. 100/04 idgF.

All values and notes are based on our research and should be understood as general recommendations and precautions. We recommend verifying suitability of our products through your own testing.

Distributor

Veganosol GmbH., Gewerbering 14, 84359 Simbach/Inn; www.veganosol.com

Version 01, 09.04.2017



We're going in a new direction




Our certificates

Austria: InfoXgen

VEGANOSOL:

Betriebsmitteldatenbank für die biologische Landwirtschaft in Österreich

-  BIO AUSTRIA: Genehmigung vor Zukauf!
VO (EG) 834/2007 idgF

VEGANOFLUID:

Betriebsmitteldatenbank für die biologische Landwirtschaft in Österreich

Das Produkt wurde auf Basis folgender Verordnungen / Richtlinien geprüft:






-  BIO AUSTRIA: Nur für Gemüse, Genehmigung vor Zukauf!
VO (EG) 834/2007 idgF



Germany: FiBL

VEGANOSOL and VEGANOFLUID:

Betriebsmittelliste Deutschland resp. FiBL-Liste Öko Verarbeitung:

-  Demeter Deutschland
-  Demeter International
-  Ecovin Deutschland
-  Gäa Deutschland
-  Naturland Deutschland

FiBL

Disclaimer:

© 2020 Veganosol GmbH, Gewerbering 14, D-84359 Simbach/Inn (Mag. Harald Stückler)

Contact: www.veganosol.com / office@veganosol.com

Photo Credits: as specified; Front page: shutterstock/sportoakimirka, shutterstock/Patryk Kosmider



Gedruckt auf naturweißem Umltpapier: ohne optische
Aufheller aus total chlorfrei gebleichtem Zellstoff hergestellt

www.veganosol.com

