

# SDS - Safety Data Sheet

according to Regulation  
(EC) No. 1907/2006 (REACH) 453/2010 (REACH), 1272/2008 (CLP) & 453/2010

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name **SANBIO® VITAL**

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

Use of the Substance/Mixture Fertilizer // Activator

### 1.3 Details of the supplier of the safety data sheet

Company SANBOS GmbH  
Geraer Strasse 14  
D-06712 Gutenborn-Drossdorf  
Germany  
Telephone +49-3441-539873  
Telefax +49-3441-539874  
Email address info@sanbos.com

### 1.4 Emergency telephone number

SANBOS GmbH, Germany Telephone +49 (0)173 6990195  
Giftinformationszentrale Nord, Göttingen, Germany Telephone +49 (0)551 19240

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

Classification (67/548/EEC,1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008 [CLP]

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

P280 Wear protective gloves and eye protection  
P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you  
unwell  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P501	Dispose of contents in accordance with regional regulations, contact your local waste recycling center for advice, container is widely recyclable

**According to European Directive 67/548/EEC as amended.**

Further information                      The product does not need to be labeled in accordance with EC directives or respective national laws.

**2.3 Other hazards**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).  
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

**3. Composition/information on ingredients**

**3.1 Substances**

Hazardous ingredients:

**AMMONIUM NITRATE**

EINECS	CAS	CHIP Classification	CLP Classification	Percent
229-347-8	6484-52-2	O: R8; Xn: R20/21/22; Xi:	Ox. Sol. 3: H272; Eye Irrit. 2: H319	1-5%

**CALCIUM NITRATE**

233-332-1	10124-37-5	O: R8; Xn: R22; Xi: R36/37/38	Ox. Sol. 3: H272; Acute Tox. 4: H302; Eye Dam. 1: H318	1-5%
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**3.2. Mixtures**

EC Classification No 1272/2008

Hazardous ingredient(s)	% w/w	CAS no	EC no	REACH Registration number	H statements
Water	40.0	7732-18-5	231-791-2	-	-
Algae extract / seaweed (Acophyllum)	26.0	84775-78-0	283-907-6		
Yucca (extraction from <i>Yucca schidigera</i> )	26.0	-	-	-	-

Urea (Amine N)	1.5	57-13-6	200-315-5	01-2119463277-33-####	-
Ammonium nitrate (Ammoniacal N)	1.5	6484-52-2	229-347-8	-	H272, H315, H319, H335
Calcium nitrate Dihydrate (Nictric N)	1.5	13477-34-4		01-2119495093-35-####	H272, H302, H319
Magnesium Sulphate Heptahydrate MgSO <sub>4</sub>	3.0	10034-99-8	231-298-2		

EEC Classification No 67/548/EEC

Hazardous ingredient(s)	%w/w	CAS no	EC no	REACH Registration number	Risk Phrases
Water	40.0	7732-18-5	231-791-2	-	-
Algae extract / seaweed (Acophyllum)	26.0	84775-78-0	283-907-6	-	-
Yucca (extraction from <i>Yucca schidigera</i> )	26.0	-	-	-	-
Urea (Amine N)	1.5	57-13-6	200-315-5	01-2119463277-33-####	-
Ammonium nitrate (Ammoniacal N)	1.5	6484-52-2	229-347-8	-	R8, R36/37/38
Calcium nitrate Dihydrate (Nictric N)	1.5	13477-34-4		01-2119495093-35-####	R8, R22, R36
Magnesium Sulphate Heptahydrate MgSO <sub>4</sub>	3.0	10034-99-8	231-298-2	-	-

#### 4. First aid measures

##### 4.1 Description of first aid measures

General advice	Get medical attention if symptoms occur. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air.
In case of skin contact	Rinse with water.
In case of eye contact	Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.
If swallowed	Clean mouth with water and drink afterwards plenty of water.

#### 4.2 Most important symptoms and effects, both acute and delayed

##### Symptoms

Skin contact	There may be irritation and redness at the site of contact.
Eye contact	There may be irritation and redness. The eyes may water profusely.
Ingestion	There may be soreness and redness of the mouth and throat.
Inhalation	Exposure may cause coughing or wheezing. Ingestion may provoke the following symptoms: Diarrhoea
Delayed / immediate effects	Delayed effects can be expected after long-term exposure.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment	For specialist advice physicians should contact the Poisons Information Service.
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### 5. Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media	The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media none.
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#### 5.2 Special hazards arising from the substance or mixture

##### Specific hazards during

Firefighting	Heating or fire can release toxic gas. Sulphur oxides
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#### 5.3 Advice for firefighters

Special protective equipment for firefighters	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
Further information	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

### 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.
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#### 6.2 Environmental precautions

Environmental precautions	Do not let product enter drains.
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### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up            Absorb into dry earth or sand.  
Sweep up and shovel into suitable containers for disposal.  
After cleaning, flush away traces with water.

### 6.4 Reference to other sections

For personal protection see section 8.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling            Avoid inhalation, ingestion and contact with skin and eyes.

Advice on protection against  
fire and explosion            The product is not flammable.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas  
and containers            Store in cool, well ventilated area. Keep container tightly closed.

Advice on common storage        No special restrictions on storage with other products.

German storage class            13 Non-combustible solids

Other data            Stable under recommended storage conditions.

### 7.3 Specific end uses

Not relevant

## 8. Exposure controls/personal protection

### 8.1 Control parameters

8.1.1 Occupational exposure:            Not applicable

8.1.2 Biological Limit Values:            Not applicable

8.1.3 Current recommended monitoring procedures:    Not applicable

8.1.4 Air contaminants formed when using the product as intended:    Not applicable

8.1.5. PNECs and DNELs

DENL values based on data for propionic acid

Exposure Route	Criteria	Values
Dermal	Long-term – local (worker)	0.260 mg/kg bw/day
	Long-term – systemic (worker)	132 mg/kg bw/day
Inhalative	Acute – local (worker)	62 mg/m <sup>3</sup>
	Acute – systemic (worker)	62 mg/m <sup>3</sup>
	Long-term – local (worker)	31 mg/m <sup>3</sup>

## 8.2 Exposure controls

Appropriate engineering

Controls Good ventilation

Personal Protection Equipment

Eye protection Use safety glasses tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Face protection Not required

Hand protection Use nitrile, latex or rubber gloves, which satisfy the specifications of EU Directive 89/686/EEC and the standard EN 420 derived from it

Other skin protection Do not wear open footwear

Respiratory protection Not required

Thermal hazards Not required

Environmental exposure controls Do not release substance to drains or surface water

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance Slightly viscous liquid

Physical state Liquid

Colour Brown

Odour Slight vinegar

pH 5.5

Melting point/range Not applicable

Flash point Not applicable

Flammability (solid, gas) The product is not flammable.

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Vapour pressure Not applicable

Viscosity 50 – 100 cPs at 20°C

Density 1,095 g/cm<sup>3</sup>, 20°C

Water solubility Miscible

Partition coefficient: n-

octanol/water	no data available
Autoignition temperature	Not applicable
Ignition temperature	Not applicable
Explosive properties	Not applicable
Oxidizing properties	Not applicable

## 9.2 Other information

Bulk density	Not applicable
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## 10. Stability and reactivity

### 10.1 Reactivity

Can react with reducing agents. May react with concentrated acids and alkalis.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions metallic	Can react with reducing agents, concentrated acids or alkalis, powders. Reactions with alkaline materials may generate ammonia.
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### 10.4 Conditions to avoid

Conditions to avoid	Excessive heat (to water boiling point), drying on combustible materials.
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### 10.5 Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids.
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### 10.6 Hazardous decomposition products

When heated, toxic and corrosive vapours/gases may be formed.

## 11. Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity	Data not available
Skin corrosion/irritation	Data not available
Serious eye damage/irritation	Data not available
Respiratory or skin sensitization	Data not available
Germ cell mutagenicity	Data not available
Carcinogenicity	Data not available
Reproductive toxicity	Data not available
STOT-repeated exposure	Data not available

## 12. Ecological information

### 12.1 Toxicity

Product

Toxicity No data available

### 12.2 Persistence and degradability

Product

Biodegradability No data available

### 12.3 Bioaccumulative potential

Product

Bioaccumulation No data available

### 12.4 Mobility in soil

Product

Physico-chemical

Removability No data available

### 12.5 Results of PBT and vPvB assessment

Product

Assessment No data available

### 12.6 Other adverse effects

Product

Environmental fate Not applicable

Photochemical ozone creation potential Not applicable

Ozone depletion potential Not applicable

Endocrine disrupting potential Not applicable

Global warming potential Not applicable

## 13. Disposal considerations

### 13.1 Waste treatment methods

This material, if discarded as produced, is not classified as a hazardous waste.

Waste treatment containers to be used for product include IBCs or HDPE drums, metal drums should only be used where lined with a protective coating

Recycle material where possible by filtration. If heavily soiled or disposal judged as necessary dispose to landfill in accordance with the Directive on waste 2008/98/EC

No specific waste treatment containers to be used for contaminated packaging. Waste treatment method for contaminated packaging should include a rinse with water. Dilute washings should be recycled where possible, possibly as a low grade fertiliser by a farmer or competent individual



Physical/ chemical properties which may affect waste treatment include the generation of an oxidizing solution. Do not mix with reducing agents.

## 14. Transport information

### 14.1 Land transport

UN Number	Not applicable
ADR	
Remarks	Not a dangerous substance as defined in the above regulations.
Tunnel restriction code	Not relevant.

### 14.2 Sea transport

IMDG	
Remarks	Not classified as dangerous in the meaning of transport regulations.

### 14.3 Air transport

IATA-DGR	
Remarks	Not classified as dangerous in the meaning of transport regulations.

### 14.4 Special precautions for user

Not relevant

### 14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Water contaminating class	
(Germany)	WGK 1 slightly water endangering
Specific regulations	-

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

## 16. Other information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Certain statements may not be applicable in all geographical regions. Product associated claims may differ based on government requirements. Product availability may vary by country. Please contact SANBOS for further information.

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