



Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/31/2016

Reviewed on 10/23/2019

1 Identification

- **Product Identifier**
- **Trade name: Vita Grow™ Ready to Use Rooting Compound**
- **Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information
- **Product Description** Rooting Compound
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
American Agriculture
9220 SE Stark St
Portland, OR 97216
800-433-6805
503-256-2402
www.vitagrow.com
- **Emergency telephone number:** 800-433-6805

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **Label elements:**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS02 GHS07

- **Signal word:** Warning

- **Hazard-determining components of labeling:**

Ethanol

- **Hazard statements:**

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

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- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves / eye protection / face protection.
 P280 Wear protective gloves.
 P280 Wear eye protection / face protection.
 P240 Ground/bond container and receiving equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P264 Wash thoroughly after handling.
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 0
FIRE	3	Fire = 0
REACTIVITY	0	Reactivity = 0

- **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Non-hazardous components:**

7732-18-5	Water, distilled water, deionized water	90-99%
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- **Description:** Mixture of substances listed below with non-hazardous additions.

- **Dangerous Components:**

CAS: 64-17-5	Ethanol	5-10%
RTECS: KQ 6300000	☞ Flam. Liq. 2, H225; ☞ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	

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• **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

• **Description of first aid measures:**

• **After inhalation:**

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

• **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation occurs, consult a doctor.

• **After eye contact:**

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

• **After swallowing:** If swallowed and symptoms occur, consult a doctor.

• **Information for doctor:**

• **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

• **Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

5 Fire-Fighting Measures

• **Extinguishing media:**

• **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• **For safety reasons unsuitable extinguishing agents:** Water with full jet

• **Special hazards arising from the substance or mixture:** No further relevant information available.

• **Advice for firefighters:**

• **Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

• **Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

• **Environmental precautions:** No special measures required.

• **Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

• **Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage

• **Handling**

• **Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

• **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

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Protect from heat.

Protect against electrostatic charges.

• **Conditions for safe storage, including any incompatibilities:**

• **Storage**

• **Requirements to be met by storerooms and receptacles:** No special requirements.

• **Information about storage in one common storage facility:** Not required.

• **Further information about storage conditions:**

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

• **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

• **Additional information about design of technical systems:** No further data; see section 7.

• **Control parameters:**

• **Components with occupational exposure limits:**

64-17-5 Ethanol

PEL Long-term value: 1900 mg/m³, 1000 ppm

REL Long-term value: 1900 mg/m³, 1000 ppm

TLV Short-term value: 1880 mg/m³, 1000 ppm

• **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

• **Exposure controls:**

• **Personal protective equipment:**

• **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

• **Breathing equipment:** Not required.

• **Protection of hands:**

S Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

• **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

• **Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

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Trade name: Vita Grow™ Ready to Use Rooting Compound**· Eye protection:****R** Tightly sealed goggles

9 Physical and Chemical Properties

· Information on basic physical and chemical properties**· General Information****· Appearance:****Form:** Liquid
Color: Light Blue Green**· Odor:** Alcohol-like**· Odor threshold:** Not determined.**· pH-value:** Not applicable.**· Change in condition****Melting point/Melting range:** Not determined.**Boiling point/Boiling range:** 78 °C (172 °F)**· Flash point:** 26 °C (79 °F)**· Flammability (solid, gaseous):** Not applicable.**· Ignition temperature:** 425 °C (797 °F)**· Decomposition temperature:** Not determined.**· Auto igniting:** Product is not self-igniting.**· Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.**· Explosion limits:****Lower:** Not determined.**Upper:** Not determined.**· Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)**· Density @ 20 °C (68 °F):** 0.8772 g/cm³ (7.32 lbs/gal)**· Relative density:** Not determined.**· Vapor density:** Not determined.**· Evaporation rate:** Not determined.**· Solubility in / Miscibility with:****Water:** Not miscible or difficult to mix.**· Partition coefficient (n-octanol/water):** Not determined.**· Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**· Solvent content:****Organic solvents:** 9.0 %**Water:** 90.8 %**VOC content:** 9.0 %

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- Solids content:** 0.2 %
- Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Heat, flame and ignition sources.
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

64-17-5 Ethanol

Oral	LD50	7060 mg/kg (rat) Remarks: Lungs, Thorax, or Respiration: Other changes. Carcinogenicity - Mouse - Oral Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Blood: Lymphomas including Hodgkin's disease. Central nervous system depression, narcosis, Damage to the heart., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Heart - Irregularities - Based on Human Evidence Central nervous system - Breathing difficulties - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence
Inhalative	LC50/4 h	20000 mg/l (rat)
	LC50/96 hours	12900-15300 mg/l (Trout)

- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories:**

IARC (International Agency for Research on Cancer):

64-17-5 Ethanol	1
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NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

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- **Toxicity:**

- **Aquatic toxicity:**

64-17-5 Ethanol

EC50 34900 mg/l (daphnia)

- **Persistence and degradability:** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential:** No further relevant information available.

- **Mobility in soil:** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment:**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

- **Waste treatment methods:**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.

- **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

- **UN-Number:**

- **DOT, ADR, IMDG, IATA**

UN1993

- **UN proper shipping name:**

- **DOT**

Flammable liquids, n.o.s. (Ethanol)

- **ADR**

UN1993 Flammable liquids, n.o.s. (Ethanol)

- **IMDG**

FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL))

- **IATA**

FLAMMABLE LIQUID, N.O.S. (ETHANOL)

- **Transport hazard class(es):**

- **DOT**



- **Class:**

3 Flammable liquids

- **Label:**

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· **ADR**



- **Class:** 3 (F1) Flammable liquids
- **Label:** 3

· **IMDG, IATA**



- **Class:** 3 Flammable liquids
- **Label:** 3
- **Packing group:** III
- **DOT, ADR, IMDG, IATA** III
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Warning: Flammable liquids
- **Danger code (Kemler):** 30
- **EMS Number:** F-E, S-E
- **Stowage Category** A
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **Transport/Additional information:**
- **DOT**
- **Quantity limitations:** On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

· **ADR**

- **Excepted quantities (EQ):** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **IMDG**

- **Limited quantities (LQ):** 5L
- **Excepted quantities (EQ):** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
- **UN "Model Regulation":** UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ETHANOL), 3, III

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

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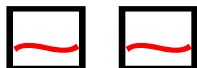
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• TSCA (Toxic Substances Control Act):	
All ingredients are listed or exempt from listing.	
• California Proposition 65:	
• Chemicals known to cause cancer:	
None of the ingredients are listed.	
• Chemicals known to cause reproductive toxicity for females:	
None of the ingredients are listed.	
• Chemicals known to cause reproductive toxicity for males:	
None of the ingredients are listed.	
• Chemicals known to cause developmental toxicity:	
64-17-5	Ethanol
• New Jersey Right-to-Know List:	
64-17-5	Ethanol
• New Jersey Special Hazardous Substance List:	
64-17-5	Ethanol
	CA, MU, TE, F3
• Pennsylvania Right-to-Know List:	
64-17-5	Ethanol
• Pennsylvania Special Hazardous Substance List:	
None of the ingredients are listed.	
• Carcinogenic categories:	
• EPA (Environmental Protection Agency):	
None of the ingredients are listed.	
• TLV (Threshold Limit Value established by ACGIH):	
64-17-5	Ethanol
	A3
• NIOSH-Ca (National Institute for Occupational Safety and Health):	
None of the ingredients are listed.	

• GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

• Hazard pictograms:

GHS02 GHS07

• Signal word: Warning**• Hazard-determining components of labeling:**

Ethanol

• Hazard statements:

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

• Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / eye protection / face protection.
P280	Wear protective gloves.
P280	Wear eye protection / face protection.
P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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P302+P352	IF ON SKIN: Wash with plenty of water.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

• National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

• Date of preparation / last revision: 05/31/2016 / -**• Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative

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NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

• *** Data compared to the previous version altered.**

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