



**Production**

**Office:** Republic of Belarus, 220004, Minsk, Nemiga Street, 38-12  
 Telephone/Fax: +375 (17) 200-05-30 | e-mail: Belarus@aridgrow.by  
**Production:** Republic of Belarus, 247988, Gomel Region, Zhitkovichi District, Chervonoe, 31-1 | http://www.aridgrow.info/

**Material Safety Data Sheet**  
**for Ameliorant-Soil Conditioner of a Long Lasting Effect**  
**Soil Activator AridGrow® LHSA-C**

**MSDS Date:** 12-05-2016

**Product Name:** AridGrow LHSA-C (Liquid Humic Soil Activator - Concentrated)

**Inventor:** AridGrow Laboratories Ltd. (UK)

**Manufacturer:** AridGrow Production JLLC (Belarus)

**I. Product and Company Description** AridGrow Production JLLC, Belarus, 247988, Chervonoe 31-1, Zhitkovichi District, Gomel Region

**Product Information/Emergency Phone/Fax Number:** +375 17 200-05-30

**Product Use:** Soil & Plant Treatment (Organic Farming)

**Chemical Name or Synonym:** Concentrated Aqueous Mixture of Humic Substances extracted from Natural Peat

**Molecular Formula:** NA

**II. Chemical Composition**

No	Component	Composition
1.	Lignohumic Acids	40%
2.	Humic Acids	30%
3.	Fulvic Acids	6%
4.	Amino Acids	4%
5.	Microelement Complex <b>B, Ca, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, S, Se, Si, Zn</b> in the water soluble Complexing Agent – Lignohumic Acids	13,5%
6.	Total Nitrogen (N)	6%
7.	Phosphorus (P <sub>2</sub> O <sub>5</sub> )	0,3%
8.	Potassium (K <sub>2</sub> O)	0,2%

**III. Hazards Identification**

**A. Emergency Overview:**

**Physical Appearance and Odor:** Dark-Brown Liquid with a characteristic Smell of Ammonia.

**B. Potential Health Effects:**

**Acute Eye:** None

**Acute Skin:** None

**Acute Inhalation:** May cause irritation to the respiratory tract and mucous membranes.

**Acute ingestion:** None

**Chronic effects:** None

**IV. First Aid Measures**

**First Aid Measures for Accidental Exposure:**

**Eye Exposure:** None

**Skin Exposure:** None

**Inhalation:** Remove to fresh air. Seek medical attention if breathing becomes difficult.

**Ingestion:** None

## V. Fire Fighting Measures

### **Fire Hazard Data:**

**Flash Point:** ND

**Method Used:** ND

**Ignition Temperature:** ND

**Flammability Limits (vol/vol %): Lower:** ND **Upper:** ND

**Extinguishing Media:** None

**Special Fire Fighting Procedures:** Move barrels from fire areas if possible.

**Unusual Fire and Explosion Hazards:** None

**Hazardous Decomposition Materials (Under Fire Conditions):** None

## VI. Accidental Release Measures

**Cleanup and Disposal of Spill:** Dispose of materials according to the applicable Federal, State, or local regulations.

## VII. Handling and Storage

**Handling:** Keep barrels closed. Avoid inhalation.

**Storage:** Store in a cool & dry place far from direct sunshine and temperature **0°C - +40°C**.

## VIII. Exposure Controls / Personal Protection

### **Exposure Guidelines:**

No	Component	Exposure limits
1.	Peat	ND
2.	Water	NA

**Engineering Controls:** Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

**Respiratory Protection:** Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH approved respirator when necessary.

**Eye / Face Protection:** None

**Skin Protection:** None

## IX. Physical and Chemical Properties

**Physical Appearance:** Dark-Brown Liquid

**Moisture (H<sub>2</sub>O):** 95%

**Odor:** Characteristic smell of ammonia

**Acidity (pH), range:** 6-10

**Specific Gravity:** 1.0

**Water Solubility:** soluble

**Melting Point Range:** NA

**Boiling Point Range:** 100°C (212°F)

**Vapor Pressure:** ND

**Bulk Density:** 1 kg/1 liter

**Percent Volatile:** ND

**Evaporation Rate:** as water

## X. Stability and Reactivity

**Chemical Stability:** Stable under standard use and storage conditions.

**Conditions to Avoid:** Keep in a well-ventilated place or open air when open.

**Materials / Chemicals to be Avoided:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Characteristic smell of natural ammonia (NH<sub>3</sub>) because of high concentration of the product

**Hazardous Polymerization:** None

## **XI. Toxicological Information**

The toxicological properties for the product:

**Acute Oral Toxicity:** LD<sub>50</sub>: 7500 mg/kg (rat)

**Acute Dermal Toxicity:** None

**Acute Inhalation Toxicity:** None

**Chronic Toxicity:** None

## **XII. Ecological Information**

### **Ecotoxicological Information:**

Degradation: None

Accumulation: None

Fish-Toxicity: None

**Chemical Fate Information:** Not Determined

## **XIII. Disposal Considerations**

**Waste Disposal Method:** Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

**Container Handling and Disposal:** Dispose of container and unused contents in accordance with federal, state, and local regulations.

## **XIV. Transportation Information**

Belarus Ministry of Transport and Communications Rating:

**Proper Shipping Name:** Not regulated

**Hazard Class:** Not regulated

**ID Number:** Not regulated

**Packaging Group:** Not regulated

## **XV. Regulatory Information**

### **Title IV Hazard Classes:**

Fire Hazard: NO

Reactive Hazard: NO

Release of Pressure: NO

Acute Health Hazard: NO

Chronic Health Hazard: NO

**Toxic Substances Control Act (TSCA):** All components are included in the inventory are ONLY of natural origin.

### **Other Regulations:**

None of the chemicals in this product is contained.

## **XVI. Other Information**

Belarus Ministry for Emergency Situations Hazard Ratings – BMES(R):

Health Hazard: 0

Flammability: 0

Reactivity: 0

Key Legend Information:

NA – Not Applicable

ND – Not Determined

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