



HESI plantenvoeding
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MATERIAL SAFETY DATA SHEET Hesi Hydro Growth

1. Identity / Description

product name:	Hesi Hydro Growth
1.1. identity:	liquid NPK fertilizer for ornamental plants enriched with micronutrients vitamins and aminoacids
1.2. manufacturer:	Hesi plantenvoeding BV
1.3. contact information:	Hesi plantenvoeding, Tel 0031 45 5690420, Edisonstr 11-17 6372 AK Landgraaf, Nederland

2. Hazardous ingredients identity information

2.1. Hazardous components: None, not classified in any hazardous substance class:

2.2. Ingredients

macronutrients

total nitrogen %:	3
available phosphoric oxide (P2O5) % :	1,9
soluble potash: (K2O) % :	3,6

Calcium CaO	0,01
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Magnesium MgO	0,2
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macronutrients

iron (Fe) % actual	0,01
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zinc (Zn) % actual	0
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manganese (Mn) % actual	0
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copper (Cu) % actual	0
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* all EDTA chelated

chelating agent (EDTA) %	0,05
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boron (B) % actual	0
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molybdenum (Mo) actual	0
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others

in smaller amounts <0,0003%: Vitamins (B1, B2, B3)

amino acids (glycine, histidine), inositol (sugar).

3. Physical / Chemical Characteristics

3.1. boiling point:	>105 degrees C
3.2. specific gravity:	1,069 g/cm3
3.3. vapour pressure:	below 1
3.4. melting point:	> - 6 degrees C
3.5. vapor density (air=1)	N/A
3.6. solubility in water:	100%
3.7. viscosity:	N/A
3.8. form:	liquid
3.9. appearance:	yellow
3.10. odor:	smells slightly like yeast (Vit B1)
3.11. pH (concentrate)	3,8-4,0



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4. Fire and explosion hazard data#

- | | |
|--|--|
| 4.1. flash point: | not flammable |
| 4.5. extinguishable media: | water, dry chemical, carbon dioxide and foam |
| 4.6. special fire fighting procedures: | none |
| 4.7. unusual fire & explosion hazards | none |
| 4.8. ignition temperature: | none |
| 4.9. hazardous decomposition: | none |
| 4.10 hazardous reactions: | none |

5. Reactivity data

- | | |
|-------------------------------|----------------------------------|
| 5.1. stability: | stable in normal use and storage |
| | Store in original container |
| 5.2. incompatibility: | N/N |
| 5.3. hazardous decomposition: | N/N |
| 5.4. hazardous reactions: | N/N |
| 5.5 hazardous polymerisation | will not occur |

6. Health Hazard data

- | | |
|---|--|
| 6.1. route of entry (inhalation) | not usually a problem. Remove to fresh air,
if necessary |
| 6.2. route of entry (skin) | flush with water (eyes 15 minutes)
(skin: wash with water and soap) |
| 6.3. route of entry (digestion) | treat symptomatically,
drink water to dilute |
| 6.4. health hazards (acute & chronic) | no hazardous material |
| 6.5. carcinogenicity: | N/A |
| 6.6. signs and symptoms of exposure: | none |
| 6.7. medical condition generally
aggravated by exposure: | none |

6.8. emergency first aid procedures:

- | | |
|--------------|---|
| eye contact: | flush with water for 15 minutes |
| skin contact | wash affected area with soap and water,
change contaminated clothing |
| inhalation | not usually a problem. Remove to fresh air,
if necessary |
| ingestion | treat symptomatically |



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7. PRECAUTION FOR SAFE HANDLING; STORAGE; AND USE OF PRODUCT

- 7.1. technical protection measures: **no special precaution**
- 7.2. personal protection including breathing **not usually necessary**
eye and hands:
- 7.3. recommended storage conditions: **tightly closed. store between 5 and 50 degrees celcius. Avoid freezing**
- 7.4. precaution on handling: **do not contaminate water, food or feed by storage or disposal, keep out of reach of children**
- 7.5. spill or leak procedures: **sweep up and place in container, wash down area with water**
- 7.5. waste disposal **place in container**

8. CONTROL MEASURES:

- 8.1. respiratory protection: **not required**
- 8.2. ventilation: **not required**
- 8.3. protective gloves: **not required**
- 8.4. eye protection: **not required**
- 8.5. other protective or handling equipment **not required**
- 8.6. work/ hygienic practices: **wash hands after contact and before eating and drinking.**
do not eat, drink or smoke, while working with substance

Abbreviations:

N/A: Not applicable
N/N: None Known

The information contained herein is based on the present state of knowlegde.
It characterizes the product with regard to the appropriate safety precautions.
It does not represent a guarantee of the properties of the product.

21.01.2009