

# Material Safety Data Sheet



Trade name: HVG Leaf (BALE) Hops  
Product Code: Leaf Hops packed (customs tariff code 1210 10)  
Version: 4.0 / EN

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## HVG LEAF (BALE) HOPS

### MATERIAL SAFETY DATA SHEET

(according to the EEC/ISO standards)

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## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

- Name of the material or preparation:**  
Product code: Baled Raw Hops, Leaf Hops, Hop Cones, 1210 10  
Customs tariff code: 1210 10  
Product name / commercial name: HVG-Leaf Hops, HVG-Bale Hops, HVG-VacuPack
- Details on manufacturer:**  
Name: HVG Hopfenverwertungsgenossenschaft e.G.  
Address: Kellerstr. 1, 85283 Wolnzach (Germany)  
Telephone: +49-8442/957-100  
Telefax: +49-8442/957-169  
e-mail: contact@hvg-germany.de
- Details on supplier:**  
Name: HVG Hopfenverwertungsgenossenschaft e.G.  
Address: Kellerstr. 1, 85283 Wolnzach (Germany)  
Telephone: +49-8442/957-100  
Telefax: +49-8442/957-169  
e-mail: contact@hvg-germany.de
- Date of preparation of MSDS:** 1999-03-12
- Date of revision of MSDS:** 2021-03-16

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### Chemical characterisation

Dried cones of the hop plant, pressed into a bale. No further processing. This MSDS applies to all existing hop varieties

### Typical characterisation of Pellets

Description	Unit	Value
$\alpha$ -acids (resins)	% w/w*	2 – 22
$\beta$ – acids (resins)	% w/w*	1 – 10
Essential oils	ml/ 100 g*	up to 4
Polyphenols and tannins	% w/w*	3 – 6
Proteins	% w/w*	up to 15
Cellulose-lingins	% w/w*	20 – 50
Moisture	% w/w*	8 – 12

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## 3. HAZARD IDENTIFICATION

No health hazards, non-toxic in normal use

## 4. FIRST AID MEASURES

### General information:

In normal use no health hazards known. Hops can generally be recommended as safe (GRAS). In some cases, the product may be a mild irritant if it gets in contact with eyes, respiratory tract or mucous membranes.

- Inhalation: Not applicable
- Skin contact: Wash contacted area with warm soapy water.
- Eye contact: May be irritating. Wash affected eye with plenty of pure water. Seek medical attention if irritation persists.
- Oral ingestion: It is an extremely bitter substance Spit out and rinse with plenty of water  
Instructions for physician: Not applicable

## 5. FIRE FIGHTING MEASURES

- Packing: Foil and wooden pallets are flammable. Extinguishing media foam, water or CO2
- Product: No known unusual fire and explosion hazards

## 6. ACCIDENTAL RELEASE MEASURES

Normal clean-up procedures with hot water and usual household cleaning agents

## 7. HANDLING AND STORAGE

- Handling: No special requirements
- Storage (durability): No special precautions necessary
- Storage class: 11 Combustible solids

Out of quality reasons Hops should be used as soon as possible after opening the packaging.

### Recommended storing conditions:

Temperature	Stability
At 10 – 15 °C (50 – 59 °F)	up to 2 years (in unopened, original packages)
At 0 – 5 °C (32 – 41 °F)	up to 5 years (in unopened, original packages)

To guarantee quality avoid heat, moisture, strong odours during storage. Hops should not be exposed to temperatures above 20°C. If foil suffers damage, the foil will lose vacuum conditions. Consequently, the hops are exposed to air and oxidation hop compounds take place resulting in a considerable deterioration of brewing quality.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Additional information on construction of technical installations: not applicable
- Components important for workshop security (limits to be controlled): not applicable
- Personal protective equipment: If dust is generated a dust mask is advisable

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

- Form: leaf hops, cone shaped flowers of the hops plant
- Colour: various shades of green
- Odour: typical hoppy

### Safety data

- pH: not applicable
- Change of state: not applicable
- Flash point: not applicable
- Flammability: not applicable
- Ignition temperature: not applicable
- Spontaneous ignition: not applicable
- Explosion limits:
  - min: not applicable
  - max: not applicable
- Vapor pressure: not applicable
- Density: 0.1 – 0.3 kg/l
- Solubility: not applicable

## 10. STABILITY AND REACTIVITY

Hop constituents oxidise in contact with air, no hazardous reactivity known. No other hazardous reactivities known.

## 11. TOXICOLOGICAL INFORMATION

Hops used for beer brewing can generally be recommended as safe (GRAS) in accordance with US FDA 21 CFR 170.30(c) and 170.3(f).

## 12. ECOLOGICAL INFORMATION

The product is all natural and biodegradable

## 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations involved for organic non-hazardous product. Packaging material (wooden pallets, cartons, foils) to be recycled.

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## 14. TRANSPORT INFORMATION

### Road transport:

- Warning board: not applicable
- GGVS/GGVE-classification: not applicable
- UN-No.: not applicable

### Transport on inland waterways:

- Class/no/letter: not applicable

### Marine transport:

- Class: not applicable

### Air transport:

- Class: not applicable

### Further information:

- None hazardous product, Comply with applicable state regulations

## 15. REGULATORY INFORMATION

### Identification according to EU-regulations:

- Hazard identification: not applicable
- Product contains: not applicable
- R-phrases: not applicable
- S-phrases: not applicable
- Further information: not applicable

### National federal regulations:

- Information on workshop limit: not applicable
- Regulation on hazardous incidents: not applicable
- Regulation on flammable liquids VbF: not applicable
- TA air: not applicable
- Water hazard classification: not applicable
- Further regulations on restrictions and prohibitions: not applicable

## 16. OTHER INFORMATION

The product is accompanied by the Phytosanitary certificate, which states that the product has been produced according to the national health regulations. The above information is based on the current state of knowledge of our product at the time of publication and is furnished without warranty of any kind. The user must satisfy himself that the product is entirely suitable for his purposes.