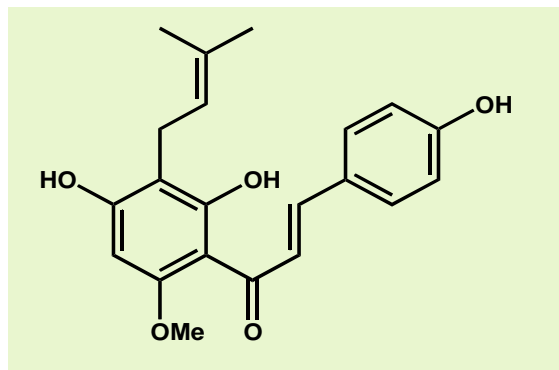


## Xantho-Flav Extract

### 15 – 40 %

#### ❖ Overview

- **Xantho-Flav Extract** is a natural product produced from hops.
- **Xantho-Flav Extract** consists of bitter compounds (mainly hard resins) and prenylated flavonoids (mainly xanthohumol) originating from hops. Other hop components are almost totally eliminated.
- **Xantho-Flav Extract** can be used as raw material for food production and in the cosmetics or pharmaceutical industry.



Xanthohumol

#### ❖ Specifications (e.g. 20 % XN)

- **Bitter compounds:** 50 – 70 %
  - **Iso-alpha-acids:** < 8 %
  - **Alpha-acids:** < 4 %
  - **Beta-acids:** < 1 %
- **Prenylated flavonoids:** 30 – 50 %
  - **Xanthohumol:** 20 %
  - **Isoxanthohumol:** < 5 %
- **Ethanol:** < 0.5 %
- **Density:** ~ 500 g/l

#### ❖ Properties

##### ☐ Taste

**Xantho-Flav Extract** has a moderate bitter taste.

##### ☐ Appearance

A yellow-green powder.

##### ☐ Solubility

Although **Xantho-Flav Extract** is almost totally insoluble in water, it shows very good solubility in ethanol.

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## □ Physiological properties

**Xantho-Flav Extract** contains a high concentration of the prenylated flavonoid xanthohumol. As demonstrated in numerous “in vitro”-tests, xanthohumol shows a wide range of potentially beneficial effects, amongst which is its high degree of anti-oxidative activity. Its bioavailability, impact on metabolism and pharmacokinetics have all been examined in animal testing. A dose rate of 100 mg xanthohumol per kg of animal weight showed no toxic effect (*Molecular Nutrition and Food Research, Edition 9/05*).

## □ Quality

All Hopsteiner® products are produced in plants accredited to internationally accepted quality standards.

## ❖ Packaging

**Xantho-Flav Extract** can be packed in various types of containers (i.e. pails, cans or drums).

## ❖ Product Use

**Xantho-Flav Extract** can be used as solid powder or, alternatively, can be dissolved in ethanol (e.g. 1 g / 100 ml).

## □ Dosage

The required dosage of **Xantho-Flav Extract** depends on its specific use and method of addition.

## □ Storage

**Xantho-Flav Extract** should be stored cool (< 5°C) and be protected from light in sealed containers.

## □ Best Before

**Xantho-Flav Extract** is stable for a min. of 2 years from date of production under the recommended storage conditions.

## □ Safety

If **Xantho-Flav Extract** gets into the eyes, irrigate thoroughly with water and seek medical attention.

For full safety information please see the relevant Hopsteiner® material safety data sheet.

## ❖ Analytical Methods

The following methods are used when analysing **Xantho-Flav Extract**:

- Iso-alpha-, alpha- and beta-acids are quantified according to HPLC-method Analytica-EBC 7.8.
- Xanthohumol and isoxanthohumol are quantified according to modified HPLC method Analytica-EBC 7.8 with UV detection at 370 nm (external calibration by pure xanthohumol) or 290 nm (external calibration by pure isoxanthohumol).

## ❖ Technical Support

We will be pleased to offer help and advice on the full range of Hopsteiner® products:

- Material Safety Data Sheets (MSDS)
- Copies of all relevant analytical procedures
- Specialist analytical services

## ❖ Remark

We take a great deal of care in the preparation of **Xantho-Flav Extract** from a natural raw material (hops). However, the use or application of **Xantho-Flav Extract** is the sole responsibility of the buyer.

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