

单宁浸膏

Tannin Extract

概述 OVERVIEW

丹宁浸膏是通过乙醇萃取形成的水溶性浸膏，主要成份为可溶于水的低分子多酚，用于增强啤酒风味。
The water-soluble fraction arising from the ethanol extraction process of leaf hops - Tannin Extract - contains low molecular weight polyphenols, which contribute to flavor.

单宁浸膏中含有低分子量多酚（如儿茶素和表儿茶素）以及糖苷键合的槲皮素、山奈酚和多花醇类物质。
Among others, the polyphenol fraction of the Tannin Extract contains the low molecular weight polyphenols catechin and epicatechin as well as glycosidically bound quercetin, kaempferol and multi-fidols.

酿酒师可以在煮沸过程中添加多酚，以促进热凝结物的形成。
Tannin Extract additionally enables the brewer to add polyphenols during wort boiling for the purpose of improving hot break formation.

规格 SPECIFICATIONS

简述 Short description:	含有水溶性组分（包括多酚类物质）的酒花浸膏 hop extract, which contains the water-soluble components of hops (including polyphenols)
苦味物质 Bittering substances:	<2%
水分 Moisture content:	40-50%
多酚 Polyphenols:	2-6%
糖 Sugars:	通常约20 % typically ca. 20 %
蛋白质 Proteins:	通常约10 % typically ca. 10 %
酸碱度 pH:	5.4±0.5
密度 Density:	1.2g/ml (20°C/68°F)
黏性 Viscosity:	5-10 mPas (20°C/68°F)

性能 PACKAGING

外观 Appearance

单宁浸膏为深褐色液体。
Tannin Extract is a dark brown liquid.

风味 Flavor

单宁浸膏能赋予啤酒的风味特征及口感饱满度，取决于添加量和添加节点。煮沸后期添加，可增强酒花风味。
The flavors and level of mouthfeel Tannin Extract imparts to beer depends on the quantity and the time of the addition. Late kettle additions can contribute to the hop flavor.

利用率 Utilization

利用率取决于添加节点。单宁浸膏易溶于水，可以实现极高的利用率。
The degree of utilization depends on the time of the addition. Very high yields can be achieved with Tannin Extract as it is readily soluble in water.

质量 Quality

所有斯丹纳产品均在符合国际公认质量标准的设施中生产，并配备完善的残留物监测体系。
All Hopsteiner products are processed in facilities which fulfill internationally recognized quality standards. A monitoring system for residues is in place.

包装规格 PACKAGING

本产品采用标准包装规格，也可以根据客户要求提供其它规格。

Our products are delivered in their respective recommended standard packaging. Alternatives may be possible upon customer request.

美国(US)与德国(DE)加工厂的包装规格如下：

Standard packages of our processing plants in the USA (US) and Germany (DE) are:

- 灌装 Cans: 0.5-3.1kg (DE)
- 桶装 Drum: 200kg (US / DE)

产品使用 USAGE

添加量 Dosage

单宁浸膏的常规添加量为50-200g/hl。

Tannin Extract is typically added at a rate of 50 - 200 g/hl.

添加方法 Application

单宁浸膏可在啤酒生产的任何阶段添加，通常在糖化车间/麦汁煮沸锅中添加。

Tannin Extract additions can take place at any stage of beer production; it is typically added in the brew house / to the wort kettle.

存储 Storage

建议在原包装中于1-10°C (34-50 °F)储藏（未启封）。

The recommended storage temperature in the original unopened packaging is 1 - 10 °C (34 - 50 °F).

Short-term, transport-related temperature deviations do not affect product quality.

最佳使用时间 Best Before Date

在建议的储藏条件下，最佳使用时间为生产/包装日期后的一年。

Under the recommended storage conditions, the shelf life from the date of production/ packaging is at least 1 years.

安全性 Safety

确保工作场所通风良好，并佩戴个人防护装备。避免接触眼睛和皮肤，请勿吸入蒸汽或粉尘。更详尽的安全资料请参考斯丹纳产品安全数据表。

Ensure good ventilation of the workplace and wear personal protective equipment. Avoid contact with eyes and skin. Do not inhale vapors or dusts. For full safety information, please refer to the relevant Hopsteiner safety data sheet.

分析方法 ANALYTICAL METHODS

使用ASBC（美国酿造协会）和Analytica-EBC（欧洲酿造协会）等国际权威机构颁布的最新标准方法进行检测。

International approved methods listed in committees such as ASBC or Analytica-EBC using current standards are applied.

产品分析 Product analytics

多酚 Polyphenols

- Analytica-EBC 7.14 (Spectro)

低分子量多酚可通过高效液相色谱法（HPLC）进行检测，需使用相应纯物质作为外标校准品。

Low molecular weight polyphenols can be measured by HPLC using the relevant pure substances as external calibration standards. Methods currently available.