二氧化碳酒花浸膏
CO_2-Hop Extract

概述 OVERVIEW

二氧化碳酒花浸膏通过使用食品级液态或超临界二氧化碳，对酒花颗粒进行萃取而制成。
CO_2-Extract is produced through the extraction of hop pellets with food-grade carbon dioxide in a liquid or supercritical form.

二氧化碳酒花浸膏含有α-酸、β-酸及酒花精油成分，在酿造过程中，可部分或完全替代酒花原花或酒花颗粒。
CO_2-Extract contains alpha acids, beta acids and essential oils and can be used to partially or entirely replace leaf hops or hop pellets in the brewing process.

二氧化碳酒花浸膏为酒花原花或酒花颗粒提供了一种浓缩且实用的替代选择。此外，二氧化碳酒花浸膏也具有较长的保质期。
CO_2-Extract offers a concentrated and practical alternative to leaf hops or hop pellets. Moreover, CO_2-Extract has a long shelf life.

规格 SPECIFICATIONS

简述 Short description：	二氧化碳酒花浸膏是专为麦汁煮沸阶段提供苦味而研发的产品。 hop extract for bittering during wort boiling
α-酸 Alpha acids：	通常为typically 30-70%
β-酸 Beta acids：	通常为typically 12-35%
酒花油 Hop oils：	通常为typically 2-12%
酸碱度 pH：	4.0 ± 0.5
密度 Density：	0.9-1.0g/ml (20℃/68°F)
黏性 Viscosity：	200-400 mPas (45℃/113°F)

性能 PACKAGING

外观 Appearance
二氧化碳酒花浸膏为金绿色至琥珀色（具体色泽取决于酒花品种和萃取条件）浓稠糖浆状产品。
Golden green to amber in color, CO_2-Extract is a thick syrup (depending on the hop variety and extraction conditions).

风味 Flavor
二氧化碳酒花浸膏几乎完整保留了酒花的风味特征，在麦汁煮沸早期阶段添加，主要作用是为啤酒提供苦味。
The flavor characteristics of the original hops are almost completely retained in CO_2-Extract. Early additions of CO_2-Extract during wort boiling mainly serve to impart bitterness.

利用率 Utilization
二氧化碳酒花浸膏煮沸时间不少于50分钟，其利用率预计可达32%-38%。由于各啤酒厂的设备和工艺条件不同，实际利用率会有所差异。
If CO_2-Extract is boiled for at least 50 minutes, utilization within the range of 32 - 38 % can be expected. Actual utilization will vary from brewery to brewery due to differences in equipment and process conditions.

质量 Quality
所有斯丹纳产品均在符合国际认证质量标准的生产设施中加工制造，并配备完善的残留物监控体系。
All Hopsteiner products are processed in facilities which fulfill internationally recognized quality standards. A monitoring system for residues is in place.

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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:

- 罐装 Cans：0.5-4.0 kg (US)
- 罐装 Cans：0.5-3.1 kg (DE)
- 桶装 Pail：4-20 kg (US)
- 钢桶装 Drum：200 kg (US/DE)

可按克/浸膏、或克/α-酸计量进行灌装。
Filling can be done as gramm extract or gramm alpha acids.
通过添加单宁浸膏或葡萄糖浆，可将浸膏的苦味含量调整至特定标准。
The extract can be adjusted to a specific bitter content by admixing tannin extract or glucose syrup.

产品使用 USAGE

二氧化碳酒花浸膏通常作为酒花原花或酒花颗粒的完全或部分替代品添加至麦汁煮沸锅中。
CO_2-Extract is typically added to the wort kettle as a complete or partial replacement for leaf hops or hop pellets.

添加量 Dosage

二氧化碳酒花浸膏的添加量应根据α-酸浓度、预估/已知利用率、以及啤酒所需的苦味强度计算。
Kettle additions of CO_2-Extract are based on the concentration of alpha acids, an estimated or known utilization and the desired intensity of bitterness in the beer.

添加方法 Application

二氧化碳酒花浸膏添加前无需预先加热，将穿孔后的浸膏罐悬挂于沸腾麦汁中，即可将所有浸膏完全流入煮沸锅。若通过自动计量装置添加，则需将其加热至45℃ (113°F) 并轻轻搅拌，以确保精确计量。
Pre-warming cans of CO_2-Extract is not necessary. Suspending punctured cans in the boiling wort will ensure that all of the extract is completely flushed out into the kettle. If CO_2-Extract is added by means of automatic dosing units, it should be warmed to 45℃ (113°F) and gently mixed to ensure perfect dosing.

存储 Storage

建议低于10℃存储（未启封）。
The recommended storage temperature in the original unopened packaging is ＜10℃.
短期运输过程中的温度波动，不会影响产品质量。
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/包装日期后至少八年。
Under the recommended storage conditions, the shelf life from the date of production/ packaging is at least 8 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 commitees such as ASBC or Analytica-EBC using current standards are applied.

产品分析 Product analytics

苦味物质含量 Concentration of bitter substances
- Analytica EBC 7.6 (LCV)
- ASBC Hops-8 (II) (LCV)
- Analytica-EBC 7.7 (HPLC)
- ASBC Hops-14 (HPLC)
- ASBC Hops-8 (I) (Spectro)

酒花油含量 Concentration of hop oils
- Analytica-EBC 7.10 (Distillation)
- ASBC Hops-13 (Distillation)