

Lisek

- Gravity **11 BLG**
- ABV ---
- IBU **30**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.7 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **13.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (89.7%)	80 %	6
Grain	Viking Wheat Malt	0.4 kg (10.3%)	83 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Citra	15 g	10 min	12 %
Aroma (end of boil)	Cascade	15 g	5 min	6 %
Aroma (end of boil)	Cascade	15 g	1 min	6 %
Whirlpool	Citra	15 g	0 min	12 %
Dry Hop	Citra	20 g	5 day(s)	12 %
Dry Hop	Cascade	20 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	fermentis