

No1

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **77**
- SRM **5.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (87%)	85 %	7
Grain	Weyermann - Light Munich Malt	0.75 kg (13%)	82 %	14

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.8 %
Boil	Equinox	20 g	20 min	16.1 %
Boil	Galaxy	20 g	20 min	13.3 %
Aroma (end of boil)	Galaxy	20 g	5 min	13.3 %
Aroma (end of boil)	Citra	20 g	5 min	14.2 %
Whirlpool	Equinox	20 g	---	16.1 %
Dry Hop	Equinox	50 g	4 day(s)	13.1 %
Dry Hop	Galaxy	20 g	4 day(s)	15 %
Dry Hop	Citra	10 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11.5 g	Fermentis
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