

Weles - IPA

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **42**
- SRM **6.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **29.4 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	7.35 kg (100%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	30 g	30 min	8.9 %
Boil	Denali	30 g	15 min	14.2 %
Aroma (end of boil)	Centennial	20 g	5 min	8.9 %
Aroma (end of boil)	Denali	20 g	5 min	14.2 %
Dry Hop	Centennial	150 g	3 day(s)	8.9 %
Dry Hop	Denali	50 g	3 day(s)	14.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP090 - San Diego Super Yeast	Ale	Slant	250 ml	White Labs