APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

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

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.3 kg *(87.8%)*	81 %	4
Grain	Weyermann - Carapils	0.5 kg *(10.2%)*	78 %	4
Grain	Weyermann - Acidulated Malt	0.1 kg *(2%)*	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	12 %
Boil	Equinox	20 g	5 min	12.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	200 ml	---