

Single Hop v 4.0

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **44**
- SRM **4.5**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **25.3 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pilzneński Premium 2-5 EBC Weyermann	4 kg (63.3%)	81 %	2.5
Grain	Słód Carabelge 30-35 EBC Weyermann	0.32 kg (5.1%)	74 %	32.5
Grain	Słód pszeniczny jasny 3-5 EBC Weyermann	1 kg (15.8%)	82 %	4
Grain	Słód pale ale 5,5-7,5 EBC Weyermann	1 kg (15.8%)	85 %	6.5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	60 min	9.5 %
Boil	Amarillo	25 g	30 min	9.5 %
Boil	Amarillo	25 g	15 min	9.5 %
Aroma (end of boil)	Amarillo	30 g	0 min	9.5 %
Dry Hop	Ekuanot	50 g	5 day(s)	15 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzk	10 g	Boil	15 min