

The Dubler

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **4.1**
- 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 **26.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (79.5%)	79 %	6
Grain	Płatki owsiane	0.6 kg (13.6%)	85 %	3
Grain	Strzegom Monachijski typ I	0.3 kg (6.8%)	79 %	12

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Whirlpool	Cascade	25 g	0 min	6 %
Whirlpool	Citra	25 g	0 min	12 %
Dry Hop	Equinox	35 g	7 day(s)	13.1 %
Dry Hop	Cascade	20 g	7 day(s)	6 %
Dry Hop	Citra	10 g	7 day(s)	12 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Other	cukier	105 g	Bottling	---