

Alfa klon

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **36**
- SRM **4.7**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **22 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **14.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11.3 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.2 kg (78%)	80 %	4
Grain	Żytni	0.5 kg (17.7%)	85 %	8
Grain	Biscuit Malt	0.04 kg (1.4%)	79 %	45
Grain	Abbey Castle	0.08 kg (2.8%)	80 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Green Bullet	15 g	60 min	11 %
Whirlpool	Green Bullet	15 g	5 min	11 %
Dry Hop	Green Bullet	70 g	3 day(s)	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Lactobacillus planatum	2 g	Mash	36 min