

appa

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **2**
- SRM **3.9**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **39.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **23.6 liter(s)** of **76C** water or to achieve **39.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (50%)	80 %	5
Grain	Strzegom Pilzneński	1.7 kg (21.3%)	80 %	4
Grain	Pszeniczny	1 kg (12.5%)	85 %	4
Grain	Pszenica niesłodowana	0.5 kg (6.3%)	75 %	3
Grain	Płatki pszeniczne	0.5 kg (6.3%)	85 %	3
Grain	Słód owsiany Fawcett	0.3 kg (3.8%)	61 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	sabro	30 g	1 min	14.8 %
Aroma (end of boil)	Nelson Sauvín	30 g	1 min	11 %
Dry Hop	Citra	30 g	2 day(s)	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	300 ml	---