Altbiter

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **44**
- SRM **8.2**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Viking malt	3.5 kg *(70%)*	80 %	5
Grain	Pszeniczny	1 kg *(20%)*	82 %	4
Grain	Cara Gold	0.5 kg *(10%)*	75 %	120

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	20 g	50 min	18 %
Aroma (end of boil)	Chinook	30 g	5 min	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	1 g	Boil	7 min
Flavor	Trawa cytrynowy	10 g	Boil	10 min

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.