

Altbier (robiepiwo.pl)

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **19**
- SRM **7.8**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **55 C**, Time **15 min**
- Temp **64 C**, Time **35 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **35 min** at **64C**
- Keep mash **25 min** at **72C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	4.4 kg (97.8%)	80 %	16
Grain	Strzegom Bursztynowy	0.1 kg (2.2%)	70 %	49

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Spalt Select	40 g	60 min	3.4 %
Boil	Hallertau Spalt Select	20 g	10 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale