Altbier (robiepiwo.pl)

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **32**
- SRM **8.3**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **38.5 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **47.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **29.8 liter(s)**
- Total mash volume **38.3 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 **29.8 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 **26 liter(s)** of **76C** water or to achieve **47.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	8 kg *(94.1%)*	80 %	16
Grain	Strzegom Bursztynowy	0.5 kg *(5.9%)*	70 %	49

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	40 g	60 min	10 %
Boil	Mandarina Bavaria	30 g	10 min	10 %

Yeasts

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