

Altbier

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **31**
- SRM **14**
- Style **Old Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **20.2 liter(s)**

Steps

- Temp **56 C**, Time **1 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **50 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **15.1 liter(s)** of strike water to **62C**
- Add grains
- Keep mash **1 min** at **56C**
- Keep mash **30 min** at **64C**
- Keep mash **50 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	4 kg (79.4%)	79 %	16
Grain	Monachijski typ II 20-25 EBC Weyermann	0.5 kg (9.9%)	80 %	20
Grain	Weyermann Caramunich 3	0.5 kg (9.9%)	76 %	150
Grain	Weyermann - Carafa I	0.04 kg (0.8%)	70 %	900

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	45 g	60 min	6.2 %