

# Altbier

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **45**
- SRM **21.4**
- Style **Düsseldorf Altbier**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **16.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.2 liter(s)**

## Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **8.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **16.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	viking Monachijski typ I	1.8 kg (62.1%)	79 %	16
Grain	Heidelberg	0.8 kg (27.6%)	80.5 %	2
Grain	Carafa III special	0.1 kg (3.4%)	70 %	1400
Grain	Caraaroma	0.1 kg (3.4%)	78 %	400
Sugar	cukier	0.1 kg (3.4%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	25 g	60 min	8.9 %
Boil	Hallertau Mittelfruh	10 g	15 min	3.1 %
Boil	Hallertau Mittelfruh	10 g	5 min	3.1 %

## Notes

- Dekokcja 15min, połowa przerwy 62 stopnie, odebrane 1/3 zacieru  
*Feb 21, 2024, 8:10 PM*