

## #62 Altbier

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **38**
- SRM **13.5**
- 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 **60 min**
- Evaporation rate **17 %/h**
- Boil size **28.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **20.6 liter(s)**

### Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **20 min**

### Mash step by step

- Heat up **15.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **20 min** at **76C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	4.8 kg (93.2%)	80 %	16
Grain	Strzegom Karmel 150	0.3 kg (5.8%)	75 %	150
Grain	Strzegom Barwiący	0.05 kg (1%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	30 g	30 min	5.5 %
Boil	Tradition	15 g	15 min	5.5 %
Boil	Magnum	15 g	60 min	13.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa altbier	Ale	Dry	11 g	Gozdawa

### Notes

- Słód barwiący dodany w 72st C  
*Jan 22, 2022, 7:04 PM*