

Altbier#2

- Gravity **12.1 BLG**
- ABV ---
- IBU **31**
- SRM **14.2**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **5 min** at **76C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann Monachijski typ II 20-25 EBC	1 kg (18.2%)	80 %	20
Grain	Weyermann Monachiski I	2 kg (36.4%)	80 %	16
Grain	Weyermann - Vienna Malt	1.4 kg (25.5%)	81 %	8
Grain	Viking Karmel 150	0.2 kg (3.6%)	75 %	150
Grain	Viking Malt Słod Barwiący	0.1 kg (1.8%)	65 %	1300
Grain	Viking Vienna Malt	0.5 kg (9.1%)	79 %	7
Grain	Viking Wheat Malt	0.3 kg (5.5%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	12.4 %
Aroma (end of boil)	Izabella	30 g	10 min	7.6 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Liquid	1300 ml	Fm

Extras

Type	Name	Amount	Use for	Time
Fining	Wirflock	5 g	Boil	10 min