

Altbier

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **39**
- SRM **15.6**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **7.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **7.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **9.5 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.2 liter(s)**
- Total mash volume **9.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **7.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **9.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	2.25 kg (93.8%)	79 %	16
Grain	Strzegom Karmel 300	0.15 kg (6.3%)	70 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	60 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	50 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Kwas fosforowy	2 g	Mash	---