

Altbier

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **51**
- SRM **11.7**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	3.5 kg (92.1%)	80 %	16
Grain	Karmelowy żytni Strzegom	0.25 kg (6.6%)	75 %	150
Grain	Barwiący	0.05 kg (1.3%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	15 %
Boil	Tradition	45 g	30 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP920 - Old Bavarian Lager Yeast	Lager	Dry	10 g	White Labs