

alttbier bittter

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **27**
- SRM **6.9**
- Style **Northern German Altbier**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **11.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (77.5%)	79 %	10
Grain	Weyermann - Carared	0.15 kg (5.8%)	75 %	45
Grain	Viking Pale Ale malt	0.2 kg (7.8%)	80 %	5
Grain	Simpsons - Crystal Rye	0.03 kg (1.2%)	73 %	177
Grain	Grodziski pszeniczny wędzony dębem	0.2 kg (7.8%)	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	7.5 %
Boil	Lublin (Lubelski)	10 g	15 min	4 %
Boil	East Kent Goldings	10 g	15 min	4.2 %
Boil	East Kent Goldings	10 g	0 min	4.2 %
Whirlpool	East Kent Goldings	15 g	15 min	4.2 %
Dry Hop	East Kent Goldings	15 g	2 day(s)	4.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP029 - German Ale/Kölsch Yeast	Ale	Liquid	150 ml	White Labs