

P4

- Gravity **13.1 BLG**
- ABV ---
- IBU **29**
- SRM **14.2**
- Style **Northern German Altbier**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.6 liter(s)**
- Total mash volume **10.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	2.29 kg (90.2%)	79 %	22
Grain	Strzegom Karmel 30	0.25 kg (9.8%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Spalt Select	20 g	60 min	3.4 %
Boil	Hallertau Spalt Select	21 g	20 min	3.4 %
Boil	Hallertau Spalt Select	13 g	10 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
US West Coast	Ale	Dry	5 g	---