

ale lager

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pale	4 kg (75.5%)	78 %	6
Grain	Malteurop Pils	1 kg (18.9%)	80 %	4
Grain	Karmelowy Jasny 30EBC	0.3 kg (5.7%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	15 g	20 min	3.5 %
Boil	Saaz (Czech Republic)	15 g	10 min	4 %
Boil	saaz	15 g	5 min	3.5 %
Boil	saaz	15 g	5 min	3.5 %
Boil	iunga	15 g	60 min	10 %
Whirlpool	Centennial	20 g	15 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
old german altbier	Ale	Dry	10 g	Gozdawa