

## #48

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **47**
- SRM **4**
- Style **Classic American Pilsner**

### 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 **15 liter(s)**
- Total mash volume **20 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (80%)	81 %	4
Grain	Strzegom Wiedeński	0.5 kg (10%)	79 %	10
Grain	Briess - Carapils Malt	0.5 kg (10%)	74 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	50 min	9.5 %
Boil	mackinac	25 g	10 min	10.5 %
Boil	Amarillo	30 g	10 min	9.5 %
Boil	mackinac	25 g	5 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
W34	Lager	Dry	20 g	---