

## 12° Sazz zakwas

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **36**
- SRM **4**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **56 liter(s)**
- Trub loss **2 %**
- Size with trub loss **57.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **65 liter(s)**

### Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

### Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **33 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **43 liter(s)** of **76C** water or to achieve **65 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	7.5 kg (68.2%)	82 %	4
Grain	Viking Vienna Malt	1 kg (9.1%)	79 %	7
Grain	Viking Munich Malt	1 kg (9.1%)	78 %	18
Grain	Weyermann - Carapils	1 kg (9.1%)	78 %	4
Grain	Weyermann - Acidulated Malt	0.5 kg (4.5%)	80 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	65 g	60 min	10.5 %
Boil	Sazz	25 g	60 min	4 %
Boil	Sazz	30 g	10 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Slant	1000 ml	---

### Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	whirfloc	2 g	Boil	10 min