jasny pils zacier

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **49**
- SRM **3.6**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **26.3 liter(s)**

Steps

- Temp **51 C**, Time **15 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **54.9C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg *(76.2%)*	81 %	4
Grain	Weyermann - Vienna Malt	1 kg *(19%)*	81 %	8
Grain	Weyermann - Carapils	0.25 kg *(4.8%)*	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	10 g	45 min	11.5 %
Boil	Magnum	15 g	45 min	10.5 %
Boil	izabella	20 g	30 min	5.1 %
Boil	Tradition	20 g	20 min	4.3 %
Boil	izabella	20 g	20 min	5.1 %
Boil	Tradition	20 g	10 min	4.3 %
Boil	izabella	20 g	10 min	5.1 %
Boil	Tradition	20 g	5 min	4.3 %
Boil	izabella	20 g	5 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	100 ml	Fermentum Mobile