

ZacierALE

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **39**
- SRM **3.6**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **24.5 liter(s)**
- Trub loss **2 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (90.9%)	81 %	4
Grain	pszeniczny ciemny	0.5 kg (9.1%)	81 %	3.1

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	10 g	60 min	6.7 %
Boil	oktawia	10 g	60 min	7.8 %
Boil	Sybilla	10 g	30 min	6.7 %
Boil	oktawia	10 g	30 min	7.8 %
Boil	sybilla	20 g	15 min	6.7 %
Boil	Oktawia	20 g	15 min	7.8 %
Boil	Sybilla	0 g	5 min	6.7 %
Boil	Oktawia	0 g	5 min	7.8 %
Aroma (end of boil)	Sybilla	10 g	0 min	6.7 %
Aroma (end of boil)	Oktawia	10 g	0 min	7.8 %
Boil	Sybilla	10 g	-3 min	6.7 %
Boil	Oktawia	10 g	-3 min	7.8 %

Dry Hop	Sybilla	40 g	5 day(s)	6.7 %
Dry Hop	Oktawia	40 g	5 day(s)	7.8 %