

## alt

- Gravity **14.2 BLG**
- ABV ---
- IBU **32**
- SRM **17.3**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **15.9 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **11.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	3.5 kg (88.2%)	79 %	22
Grain	Caramunich Malt	0.3 kg (7.6%)	71.7 %	110
Grain	Pszeniczny	0.12 kg (3%)	85 %	4
Grain	Zakwaszający	0.05 kg (1.3%)	--- %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	15 g	60 min	6.5 %
Boil	Marynka	7 g	60 min	10 %
Aroma (end of boil)	Sybilla	20 g	10 min	6.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Slant	200 ml	---