

## Faza młynarza

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **3.9**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **15.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.5 kg (49%)	80 %	4
Grain	Pszeniczny	2 kg (39.2%)	85 %	3
Grain	Strzegom Monachijski typ I	0.5 kg (9.8%)	79 %	12
Grain	Carabelge	0.1 kg (2%)	80 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	20 g	60 min	7.1 %
Boil	Sybilla	10 g	15 min	3.5 %
Boil	Oktawia	10 g	15 min	7.1 %
Boil	Sybilla	20 g	5 min	3.5 %
Boil	Oktawia	20 g	5 min	7.1 %
Aroma (end of boil)	Sybilla	30 g	0 min	3.5 %
Aroma (end of boil)	Oktawia	30 g	0 min	7.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	---