

## pszenica nocą

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **15**
- SRM **17.2**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **44 C**, Time **20 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński optima	1 kg (18.2%)	82.6 %	4
Grain	Monachijski Optima	1 kg (18.2%)	78.9 %	18
Grain	pszeniczny optima	3 kg (54.5%)	82.2 %	4
Grain	Carafa Special typ II	0.1 kg (1.8%)	65 %	1150
Grain	Karmelowy Jasny 20-30EBC optima	0.3 kg (5.5%)	75.9 %	25
Grain	Strzegom Czekoladowy ciemny	0.1 kg (1.8%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
wb-06	Wheat	Dry	11.5 g	---