

## Mroczna Pani 2

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- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **53**
- SRM **36.4**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.2 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **10.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **5.6 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2 kg (56.3%)	85 %	7
Grain	Weyermann - Smoked Wheat Malt	1 kg (28.2%)	81 %	6
Grain	Weyermann - Carafa III	0.2 kg (5.6%)	70 %	1024
Grain	Oats, Flaked	0.15 kg (4.2%)	80 %	2
Grain	Weyermann - Chocolate Wheat	0.2 kg (5.6%)	74 %	788

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	12.8 %
Boil	Northern Brewer	20 g	20 min	8.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	150 ml	Danstar