

## #13 Dark Porter na monachijskim II

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **49**
- SRM **36.7**
- Style **Baltic Porter**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

### Steps

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

### Mash step by step

- Heat up **21.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	4.5 kg (55.6%)	79 %	16
Grain	Czekoladowy	0.6 kg (7.4%)	60 %	788
Grain	Caramel pils	0.5 kg (6.2%)	75 %	3
Grain	Karmelowy jasny	0.5 kg (6.2%)	79 %	30
Grain	crystal II	1 kg (12.3%)	80 %	200
Liquid Extract	WES ekstrakt słodowy jasny	1 kg (12.3%)	80 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Green Bullet	40 g	60 min	12.9 %
Aroma (end of boil)	Green Bullet	20 g	10 min	12.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
34/70	Lager	Slant	300 ml	Safale