

#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 |