

## 56 PORTER BAŁTYCKI

- Gravity **21.6 BLG**
- ABV **9.7 %**
- IBU **29**
- SRM **41.8**

### Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **31.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.8 liter(s)**
- Total mash volume **37 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **27.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	4.5 kg (47.1%)	80 %	16
Grain	Pilzneński	3.2 kg (33.5%)	81 %	4
Grain	Carafa II	0.35 kg (3.7%)	70 %	812
Grain	Special B Malt	0.15 kg (1.6%)	65.2 %	315
Adjunct	Płatki owsiane	0.3 kg (3.1%)	85 %	3
Grain	Viking Czekoladowy ciemny	0.25 kg (2.6%)	67 %	900
Grain	Słód Caramunich Typ II Weyermann	0.3 kg (3.1%)	73 %	120
Grain	Weyermann - Chocolate Rye	0.25 kg (2.6%)	20 %	493
Grain	Jęczmień palony	0.25 kg (2.6%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	11 %
Boil	Lublin (Lubelski)	30 g	20 min	4 %
Boil	Lublin (Lubelski)	10 g	10 min	4 %