

## robust porter 14

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- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **58**
- SRM **32**
- Style **Robust Porter**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **27.3 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **75C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	3.5 kg (67.3%)	80 %	8
Grain	Karamel Pils Steinbach	0.5 kg (9.6%)	79 %	6
Grain	Strzegom Karmel 150	0.5 kg (9.6%)	75 %	150
Grain	Czekoladowy castle	0.15 kg (2.9%)	60 %	900
Grain	Strzegom Barwiący	0.15 kg (2.9%)	68 %	1300
Grain	Pszeniczny Czekoladowy Weyermann	0.2 kg (3.8%)	73 %	1001
Grain	Płatki owsiane	0.2 kg (3.8%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	13.5 %
Boil	lunga	15 g	30 min	11 %
Boil	Lublin (Lubelski)	15 g	20 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11 g	Safale
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### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min
Flavor	Kakaowiec ziarno łuskane (lekko prażone)	100 g	Secondary	7 day(s)