

## #55

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **34**
- SRM **35.7**

### 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 liter(s)**
- Total mash volume **27.9 liter(s)**

### Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **72C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	4 kg (57.3%)	78 %	6
Grain	Barley, Torrefied	1 kg (14.3%)	79 %	100
Grain	Biscuit Malt	0.5 kg (7.2%)	79 %	50
Grain	Pszeniczny	0.5 kg (7.2%)	85 %	4
Grain	Aromatic Malt	0.5 kg (7.2%)	78 %	50
Grain	Jęczmień palony	0.085 kg (1.2%)	55 %	1500
Grain	Strzegom Czekoladowy ciemny	0.3 kg (4.3%)	68 %	1000
Grain	Briess - Black Malt	0.1 kg (1.4%)	55 %	1400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Aurora	20 g	45 min	7.2 %
Boil	Aurora	20 g	30 min	7.2 %
Boil	bobek	30 g	15 min	6.1 %
Boil	bobek	30 g	5 min	6.1 %