

Asfalt

- Gravity **18.4 BLG**
- ABV ---
- IBU **44**
- SRM **39.5**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **13.2 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **17 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **17 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Peat Smoked Malt	3 kg (70.6%)	74 %	6
Grain	Oats, Flaked	1 kg (23.5%)	80 %	2
Grain	Strzegom Czekoladowy ciemny	0.2 kg (4.7%)	68 %	1200
Grain	Strzegom Barwiący	0.05 kg (1.2%)	68 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Boil	lunga	15 g	5 min	11 %