smokey stout

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **19**
- SRM **4.8**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg *(50%)*	80 %	5
Grain	Viking Malt Wędzony Jabłonią	1 kg *(33.3%)*	82 %	10
Grain	Płatki owsiane	0.5 kg *(16.7%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	20 g	60 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	200 ml	Fermentum Mobile