

Smoked FES

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **35**
- SRM **30.4**
- Style **Foreign Extra Stout**

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 **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (30.3%)	80 %	5
Grain	Wędzony bukiem Viking Malt	3.5 kg (53%)	82 %	10
Grain	Caraaroma	0.3 kg (4.5%)	78 %	400
Grain	Weyermann - Carafa II	0.2 kg (3%)	70 %	1100
Grain	Jęczmień palony	0.2 kg (3%)	55 %	1000
Grain	Płatki jęczmienne	0.4 kg (6.1%)	1 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	5.8 %
Boil	Challenger	40 g	30 min	5.8 %
Aroma (end of boil)	Challenger	30 g	1 min	5.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	6.25 g	Boil	15 min