

fest święta

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **21**
- SRM **47.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **7 %**
- Size with trub loss **18.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **27.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	chocolate	0.5 kg (7.2%)	68 %	400
Grain	choco max	0.5 kg (7.2%)	68 %	1000
Grain	kawowy	0.5 kg (7.2%)	77 %	250
Grain	Strzegom Wiedeński	2.75 kg (39.6%)	79 %	10
Grain	Viking Pale Ale malt	2.2 kg (31.7%)	80 %	5
Grain	Strzegom Karmel 300	0.5 kg (7.2%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	50 min	4.5 %

Yeasts

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