

Bitter

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **27**
- SRM **7.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (40.7%)	82 %	4
Grain	Viking Pale Ale malt	2.5 kg (50.9%)	80 %	5
Grain	Strzegom Karmel 150	0.4 kg (8.1%)	75 %	150
Grain	Czekoladowy	0.01 kg (0.2%)	60 %	788

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	35 g	55 min	5.1 %
Boil	Fuggles	15 g	30 min	4.5 %
Boil	Bramling	15 g	30 min	6 %
Boil	East Kent Goldings	15 g	2 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	---