Bitter

- Gravity **13.8 BLG**
- ABV **---**
- IBU **30**
- SRM **10.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1.5 liter(s)**
- Total mash volume **2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	WES ekstrakt słodowy jasny	3.4 kg *(87.2%)*	80 %	---
Grain	Strzegom Karmel 150	0.15 kg *(3.8%)*	75 %	150
Grain	Strzegom Karmel 30	0.35 kg *(9%)*	70 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	northdown	20 g	60 min	7.8 %
Boil	Target	25 g	15 min	8 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	130 ml	Fermentum Mobile