

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **82**
- SRM **34.9**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- 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 **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) US	3 kg (81.1%)	79 %	4
Grain	Weyermann - Carafa II	0.2 kg (5.4%)	70 %	837
Grain	Jęczmień palony	0.1 kg (2.7%)	55 %	600
Grain	Strzegom Czekoladowy ciemny	0.1 kg (2.7%)	68 %	1200
Grain	Brown Malt (British Chocolate)	0.3 kg (8.1%)	70 %	175

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	25 g	30 min	16.5 %
Boil	Simcoe	20 g	10 min	13.2 %
Whirlpool	Simcoe	20 g	15 min	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Slant	100 ml	Mangrove Jack's