

paint it black

- Gravity **16.8 BLG**
- ABV ---
- IBU **45**
- SRM **62.7**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (52.6%)	80 %	4
Grain	Biscuit Malt	0.6 kg (15.8%)	79 %	45
Grain	Płatki owsiane	0.6 kg (15.8%)	85 %	3
Grain	Strzegom Karmel 600	0.3 kg (7.9%)	68 %	601
Grain	Strzegom Czekoladowy ciemny	0.3 kg (7.9%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	8.8 %
Boil	Marynka	20 g	15 min	8.8 %
Dry Hop	Marynka	10 g	30 day(s)	8.8 %

Yeasts

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

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Spice	bób tonka	8 g	Boil	15 min
Spice	skórka słodkiej pomarańczy	20 g	Boil	15 min
Spice	bób tonka zalany wódką	8 g	Secondary	30 day(s)
Spice	skórka słodkiej pomarańczy zalana wódką	20 g	Secondary	30 day(s)