tropical stout wawer 100 l

- Gravity **15.9 BLG**
- ABV **---**
- IBU **46**
- SRM **64.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **100 liter(s)**
- Trub loss **5 %**
- Size with trub loss **105 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **126.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **92.2 liter(s)**
- Total mash volume **122.9 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **92.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **65 liter(s)** of **76C** water or to achieve **126.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) Bel	16 kg *(46.1%)*	80 %	6
Grain	Weyermann - Carared	4 kg *(11.5%)*	75 %	45
Grain	Weyermann - Carapils	2 kg *(5.8%)*	78 %	4
Grain	weyermann - caramunich typ II	2 kg *(5.8%)*	75 %	125
Grain	Weyermann - Carafa I	2 kg *(5.8%)*	70 %	690
Grain	Fawcett - Pale Chocolate	4 kg *(11.5%)*	71 %	600
Grain	Strzegom Czekoladowy ciemny	0.32 kg *(0.9%)*	68 %	1200
Grain	żyto palone	0.4 kg *(1.2%)*	1 %	750
Adjunct	Płatki owsiane	4 kg *(11.5%)*	1 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	80 g	60 min	10 %

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

Boil	Chinook	80 g	60 min	13 %
Aroma (end of boil)	Mosaic	40 g	10 min	10 %
Aroma (end of boil)	Chinook	40 g	10 min	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	46 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	korzeń lukrecji	80 g	Boil	20 min
Flavor	owoce kandyzowane tropical mix	800 g	Boil	20 min