Tropical stout #2

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **42**
- SRM **54.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **15 %/h**
- Boil size **17.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.6 liter(s)**
- Total mash volume **18.2 liter(s)**

Steps

- Temp **72 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **13.6 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **75 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	castle malting - Maris Otter	3 kg *(65.9%)*	81 %	6
Grain	Płatki owsiane	0.5 kg *(11%)*	60 %	3
Grain	Caraaroma	0.3 kg *(6.6%)*	78 %	400
Grain	crystal dark	0.2 kg *(4.4%)*	65.2 %	300
Grain	weyermann - Pszeniczny Czekoladowy	0.25 kg *(5.5%)*	73 %	1200
Grain	czekoladowy ciemny	0.2 kg *(4.4%)*	70 %	1200
Grain	Carafa II special	0.1 kg *(2.2%)*	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	80 min	12.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP090 - San Diego Super Yeast	Ale	Liquid	80 ml	White Labs

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