Wykidajło

- Gravity **15 BLG**
- ABV **---**
- IBU **45**
- SRM **35.4**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **17.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **21.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **18.7 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **14.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **21.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg *(72.3%)*	85 %	7
Grain	Fawcett - Pszeniczny Czekoladowy	0.25 kg *(6%)*	73 %	1001
Grain	Caraaroma	0.3 kg *(7.2%)*	78 %	400
Grain	Jęczmień palony	0.2 kg *(4.8%)*	55 %	985
Grain	Płatki owsiane	0.4 kg *(9.6%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Cascade	30 g	15 min	6 %
Boil	Cascade	20 g	5 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	150 ml	Fermentum Mobile

Extras

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

Type	Name	Amount	Use for	Time
Water Agent	Calcium Carbonate	5 g	Mash	60 min