Czekoladowo-Karmelowe

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **56**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **23.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **75 C**, Time **60 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **84.2C**
- Add grains
- Keep mash **60 min** at **75C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **23.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Karmel 600	1 kg *(20%)*	68 %	600
Grain	Czekoladowy	1 kg *(20%)*	60 %	788
Grain	Pszeniczny	2 kg *(40%)*	85 %	4
Grain	Strzegom Monachijski typ II	1 kg *(20%)*	79 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Wai-iti	100 g	30 min	2.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	---

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