Chałupy 13

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **24**
- SRM **4.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **1.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	2.5 kg *(83.3%)*	81 %	4
Grain	Weyermann - Pale Wheat Malt	0.5 kg *(16.7%)*	85 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Iunga	37 g	60 min	8.4 %
Aroma (end of boil)	Książęcy	25 g	5 min	7 %
Aroma (end of boil)	Książęcy	25 g	0 min	7 %
Whirlpool	Książęcy	50 g	15 min	7 %
Dry Hop	Książęcy	50 g	2 day(s)	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	11 g	---

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