Lekka ne ipa z modyfikacją wody

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **19**
- SRM **5.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **28 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.1 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **28 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg *(63.5%)*	80 %	4
Grain	Melanoiden Malt	0.5 kg *(7.9%)*	80 %	39
Grain	Pszeniczny	1 kg *(15.9%)*	85 %	4
Grain	Jęczmień niesłodowany	0.4 kg *(6.3%)*	75 %	2
Grain	Płatki owsiane	0.4 kg *(6.3%)*	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Equinox	5 g	60 min	13.1 %
Boil	Centennial	15 g	30 min	10.5 %
Aroma (end of boil)	Centennial	35 g	0 min	10.5 %
Whirlpool	Mosaic	50 g	0 min	10 %
Whirlpool	Simcoe	28 g	0 min	13.2 %
Dry Hop	Citra	60 g	5 day(s)	12 %
Dry Hop	Amarillo	30 g	5 day(s)	9.5 %
Dry Hop	Cascade	30 g	5 day(s)	6 %

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

Yeasts

Name	Type	Form	Amount	Laboratory
FM55 Zielone Wzgórze	Ale	Slant	200 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Water Agent	chlorek wapnia	10 g	Mash	---
Water Agent	kwas fosforowy	5 g	Mash	---
Water Agent	gips	5 g	Mash	---

Notes

- chmiel equinox 60 g i chmiel cascade 30 g do fermentacji burzliwej
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