GREEN KARUZEL 2022

- Gravity **14.3 BLG**
- ABV **---**
- IBU **29**
- SRM **4.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **1600 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1680 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **1876.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1500 liter(s)**
- Total mash volume **2000 liter(s)**

Steps

- Temp **70 C**, Time **80 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **1500 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **80 min** at **70C**
- Keep mash **10 min** at **76C**
- Sparge using **876.8 liter(s)** of **76C** water or to achieve **1876.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	200 kg *(40%)*	80 %	5
Grain	Słód owsiany Fawcett	200 kg *(40%)*	61 %	5
Grain	Weyermann - Carapils	50 kg *(10%)*	78 %	4
Grain	Żytni	50 kg *(10%)*	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Citra	2000 g	40 min	13 %
Dry Hop	Citra	5000 g	5 day(s)	12 %
Dry Hop	Mosaic	5000 g	5 day(s)	10 %
Dry Hop	Galaxy	5000 g	5 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
London Ale III	Ale	Slant	10000 ml	White Labs

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	Chlorek wapnia	500 g	Mash	60 min