

IPA-Warka testowa (nowy kociołek)

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **41**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **34.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **41.3 liter(s)**

Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.3 liter(s)**
- Total mash volume **40.4 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **30.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **41.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (49.5%)	81 %	4
Grain	Viking Pale Ale malt	2 kg (19.8%)	80 %	5
Grain	Briess - Carapils Malt	0.3 kg (3%)	74 %	3
Grain	carabody	0.5 kg (5%)	74 %	3
Grain	Słód owsiany Fawcett	2 kg (19.8%)	61 %	5
Grain	Pszeniczny	0.3 kg (3%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Zula	10 g	50 min	13.3 %
Aroma (end of boil)	Zula	30 g	10 min	13.3 %
Aroma (end of boil)	Galaxy	20 g	5 min	17.4 %
Whirlpool	Galaxy	30 g	0 min	17.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	300 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	1000 g	Boil	15 min
Fining	mech irlandzki	5 g	Boil	12 min