bIrokez

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **26**
- SRM **8.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **19.2 liter(s)**

Mash information

- Mash efficiency **66 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

Steps

- Temp **64 C**, Time **55 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **16.1 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **55 min** at **64C**
- Keep mash **5 min** at **75C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **19.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Extra Pale Crisp	3 kg *(65.2%)*	82 %	4
Grain	Strzegom Monachijski typ I	0.3 kg *(6.5%)*	79 %	16
Grain	Rahr - Red Wheat Malt	0.5 kg *(10.9%)*	85 %	89
Grain	Weyermann - Carapils	0.2 kg *(4.3%)*	78 %	4
Grain	Płatki jęczmienne	0.3 kg *(6.5%)*	60 %	4
Grain	Płatki owsiane	0.3 kg *(6.5%)*	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Motueka	15 g	50 min	7 %
Boil	Nectaron	15 g	10 min	13.6 %
Aroma (end of boil)	Nectaron	15 g	1 min	13.6 %
Dry Hop	Sabro Cryo Hops	20 g	3 day(s)	20 %
Dry Hop	Motueka Cryo Hops	20 g	3 day(s)	16 %

Yeasts

Name	Type	Form	Amount	Laboratory

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

Safale S-04	Ale	Dry	11.5 g	---

Extras

Type	Name	Amount	Use for	Time
Spice	Pieprz czerwony	5 g	Boil	10 min
Fining	Mech Irlandzki	5 g	Boil	5 min
Water Agent	Kwas mlekowy	2 g	Mash	55 min