

Ne ipa Czarek ver 6 Ph kwas

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **56**
- SRM **5.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **1 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.92 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **69 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.6 liter(s)** of strike water to **72.7C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **69C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.3 kg (58.1%)	79 %	6
Grain	Strzegom Pszeniczny	1 kg (13.5%)	81 %	6
Grain	Żytni	0.5 kg (6.8%)	85 %	8
Grain	Oats, Flaked	0.8 kg (10.8%)	80 %	2
Grain	Barley, Flaked	0.8 kg (10.8%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	45 min	10.3 %
Boil	zibi	20 g	30 min	8 %
Boil	lunga	30 g	10 min	10.3 %
Aroma (end of boil)	lunga	40 g	5 min	10.3 %
Aroma (end of boil)	Zibi	30 g	5 min	8 %
Whirlpool	zibi	50 g	0 min	8 %
Dry Hop	Exp 2/20 Polishops	400 g	3 day(s)	8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11 g	Safbrew