

Brudny Hary

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **71**
- SRM **6.1**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **45 min**

Mash step by step

- Heat up **27 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pszeniczny	4.5 kg (50%)	81 %	6
Grain	pale ale	4.5 kg (50%)	80 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	citra	55 g	60 min	16 %
Aroma (end of boil)	Eureka!	55 g	5 min	18 %
Dry Hop	Citra	100 g	5 day(s)	12 %
Dry Hop	Galaxy	60 g	5 day(s)	15 %
Dry Hop	Palisade	60 g	5 day(s)	7.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us -05	Ale	Slant	400 ml	---

Extras

Type	Name	Amount	Use for	Time
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Water Agent	gips	10 g	Mash	---
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