White Belgian ipa apok

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **46**
- SRM **4.2**
- Style **White IPA**

Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **28.1 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **21.4 liter(s)** of strike water to **60.5C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg *(29.9%)*	81 %	4
Grain	Viking Pale Ale malt	1 kg *(14.9%)*	80 %	5
Grain	Pszeniczny	2.5 kg *(37.3%)*	85 %	4
Grain	Briess - Carapils Malt	0.5 kg *(7.5%)*	74 %	3
Grain	Płatki pszeniczne	0.5 kg *(7.5%)*	85 %	3
Grain	Weyermann - Acidulated Malt	0.2 kg *(3%)*	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	22 g	60 min	15.5 %
Boil	Admiral	11 g	10 min	14.3 %
Boil	Galaxy	50 g	5 min	14.5 %
Boil	Rakau (NZ)	50 g	0 min	10.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM26 Belgijskie Pagórki	Ale	Slant	200 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Other	łuska ryżowa	250 g	Mash	10 min