

# Piórko #1 - Lite APA - Browar na Wyżynie

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **16**
- SRM **4.4**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

## Steps

- Temp **64 C**, Time **5 min**
- Temp **78 C**, Time **10 min**
- Temp **72 C**, Time **55 min**

## Mash step by step

- Heat up **9.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **5 min** at **64C**
- Keep mash **55 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pale ale Viking Malt	0.8 kg (25%)	80 %	6
Grain	golden ale Viking Malt	0.8 kg (25%)	80 %	11
Grain	dekstrynowy Viking Malt	1 kg (31.3%)	79 %	16
Grain	płatki żytnie błyskawiczne	0.6 kg (18.7%)	70 %	1

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Ekuanot (USA) - granulát	1 g	100 min	16.1 %
Aroma (end of boil)	Nelson Sauvín (NZ) - granulát	14 g	5 min	11.4 %
Aroma (end of boil)	Ekuanot (USA) - granulát	15 g	5 min	16.1 %
Aroma (end of boil)	Centennial (USA) - granulát	15 g	5 min	8.5 %
Whirlpool	Centennial (USA) - granulát	25 g	0 min	8.5 %

Whirlpool	Ekuanot (USA) - granulat	25 g	0 min	16.1 %
Whirlpool	Nelson Sauvin (NZ) - granulat	15 g	0 min	11.4 %
Dry Hop	Centennial (USA) - granulat	30 g	3 day(s)	8.5 %
Dry Hop	Ekuanot (USA) - granulat	30 g	3 day(s)	16.1 %
Dry Hop	Nelson Sauvin (NZ) - granulat	20 g	3 day(s)	11.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand Danstar London ESB	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Water Agent	woda demineralizowana	15000 g	Mash	70 min
Water Agent	kwas fosforowy 75%	2 g	Mash	70 min
Water Agent	chlorek sodu	8 g	Mash	70 min
Water Agent	siarczan wapnia	4 g	Mash	70 min
Fining	mech irlandzki	1 g	Boil	15 min

## Notes

- Profil wody:  
Ca+2 Mg+2 Na+ Cl- SO4-2 HCO Alkalinity Residual  
61.3 3.2 108.2 168.2 82.4 50.7 46.8 1.2

SO42-/Cl- ratio: 0.5 Very Malty

<https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=X8BHJ5K>  
Jul 22, 2018, 7:43 AM