

Polish APA Izabella#1

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **26**
- SRM **7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (43.9%)	80 %	5
Grain	Viking Vienna Malt	2 kg (35.1%)	79 %	7
Grain	Viking Wheat Malt	0.5 kg (8.8%)	83 %	5
Grain	Monachijski typ II 20-25 EBC Weyermann	0.5 kg (8.8%)	80 %	20
Grain	Viking Karmel 150	0.2 kg (3.5%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	5.7 %
Boil	Marynka	20 g	20 min	8.4 %
Aroma (end of boil)	Izabella	50 g	0 min	6.8 %
Dry Hop	Izabella	50 g	4 day(s)	6.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
us - 05	Ale	Dry	11.5 g	fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	4 g	Mash	60 min