

# Polish APA Izabella#1

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **28**
- SRM **6.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

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

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (45.5%)	80 %	5
Grain	Viking Vienna Malt	2 kg (36.4%)	79 %	7
Grain	Viking Wheat Malt	0.5 kg (9.1%)	83 %	5
Grain	Caramunich® typ I	0.5 kg (9.1%)	73 %	80

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.4 %
Boil	Lublin (Lubelski)	20 g	10 min	5.7 %
Aroma (end of boil)	Izabella	40 g	0 min	6.8 %
Dry Hop	Izabella	60 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