

# 100% Rye APA 10 blg

- Gravity **10 BLG**
- ABV ---
- IBU **30**
- SRM **13**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

## Steps

- Temp **45 C**, Time **20 min**
- Temp **63 C**, Time **45 min**
- Temp **15 C**, Time **72 min**

## Mash step by step

- Heat up **6 liter(s)** of strike water to **14.2C**
- Add grains
- Keep mash **72 min** at **15C**
- Keep mash **20 min** at **45C**
- Keep mash **45 min** at **63C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	1.5 kg (75%)	85 %	8
Grain	Karmelowy żytni Strzegom	0.5 kg (25%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Cascade	25 g	5 min	6 %
Whirlpool	Cascade	25 g	30 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale

## Notes

- filtruj normalnie a jak nie pójdzie to przez pieluchę i przez pończochy, dodać 0,5 kg złody więcej ba wypadek utraty wydajności  
*Apr 18, 2017, 11:19 AM*