

# 1 landrynowy

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **44**
- SRM **11.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 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 **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **8.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	2 kg (69%)	80 %	16
Grain	Rahr - Pale Ale Malt	0.5 kg (17.2%)	79 %	79
Grain	cooke	0.4 kg (13.8%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	13.5 %
Aroma (end of boil)	Magnum	5 g	5 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP005 - British Ale Yeast	Ale	Dry	10 g	White Labs