

# 1 landrynowy

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- 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 |