

# Ruda z Bunkra

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **71**
- SRM **16**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **2 %**
- Size with trub loss **41.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **3 %/h**
- Boil size **44.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **36.3 liter(s)**
- Total mash volume **48.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **36.3 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **44.3 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount      | Yield | EBC |
|-------|-------------------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt          | 10 kg (80%) | 80 %  | 5   |
| Grain | Karmelowy Pszeniczny Strzegom | 0.5 kg (4%) | 79 %  | 130 |
| Grain | Strzegom Karmel 150           | 2 kg (16%)  | 75 %  | 150 |

## Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Citra    | 100 g  | 60 min   | 12 %       |
| Boil      | Amarillo | 25 g   | 15 min   | 9.5 %      |
| Boil      | Cascade  | 25 g   | 15 min   | 6 %        |
| Whirlpool | Amarillo | 25 g   | 5 min    | 9.5 %      |
| Whirlpool | Cascade  | 25 g   | 5 min    | 6 %        |
| Dry Hop   | Amarillo | 50 g   | 9 day(s) | 9.5 %      |
| Dry Hop   | Cascade  | 50 g   | 9 day(s) | 6 %        |

## Yeasts

| Name                     | Type | Form | Amount | Laboratory |
|--------------------------|------|------|--------|------------|
| Bulldog B5 American West | Ale  | Dry  | 20 g   | ---        |