

# American RYE BROWN ALE

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **25.3**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **55 C**, Time **5 min**
- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

## Fermentables

| Type  | Name                            | Amount         | Yield | EBC  |
|-------|---------------------------------|----------------|-------|------|
| Grain | Pale Ale Maris Otter Extra      | 1 kg (22.2%)   | 80 %  | 4    |
| Grain | Żytni                           | 2 kg (44.4%)   | 85 %  | 8    |
| Grain | Weyermann - Pilsner Malt        | 1 kg (22.2%)   | 81 %  | 4    |
| Grain | Strzegom Czekoladowy jasny      | 0.25 kg (5.6%) | 68 %  | 400  |
| Grain | Weyermann - Dehusked Carafa III | 0.25 kg (5.6%) | 70 %  | 1300 |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Columbus | 20 g   | 40 min | 15.4 %     |
| Boil    | Mosaic   | 50 g   | 0 min  | 10 %       |
| Boil    | Mosaic   | 50 g   | 0 min  | 10 %       |

## Yeasts

| Name          | Type | Form | Amount | Laboratory |
|---------------|------|------|--------|------------|
| Lutra OYL-071 | Ale  | Dry  | 11 g   | ---        |