

# American stout

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **39**
- SRM **46.5**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **22.6 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **22.6 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount          | Yield  | EBC |
|-------|------------------------|-----------------|--------|-----|
| Grain | Briess - Pale Ale Malt | 3.4 kg (51.1%)  | 80 %   | 7   |
| Grain | Monachijski            | 1.25 kg (18.8%) | 80 %   | 16  |
| Grain | Simpsons - Coffee Malt | 0.65 kg (9.8%)  | 74 %   | 296 |
| Grain | Strzegom Karmel 300    | 0.3 kg (4.5%)   | 70 %   | 299 |
| Grain | Czekoladowy            | 0.35 kg (5.3%)  | 60 %   | 788 |
| Grain | Jęczmień palony        | 0.55 kg (8.3%)  | 55 %   | 985 |
| Grain | Acid Malt              | 0.15 kg (2.3%)  | 58.7 % | 6   |

## Hops

| Use for             | Name   | Amount | Time   | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil                | Simcoe | 15 g   | 60 min | 13.2 %     |
| Aroma (end of boil) | Simcoe | 25 g   | 15 min | 13.2 %     |
| Aroma (end of boil) | Simcoe | 10 g   | 5 min  | 13.2 %     |

## Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| Us 05 | Ale  | Slant | 200 ml | ---        |