

# American Stout I

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **34**
- SRM **37.5**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **21.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **35 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt             | 5 kg (69%)     | 80 %  | 5   |
| Grain | Caramel/Crystal Malt             | 0.5 kg (6.9%)  | 72 %  | 236 |
| Grain | Weyermann - Słód pszeniczny      | 0.2 kg (2.8%)  | 82 %  | 4   |
| Grain | Carafa II                        | 0.3 kg (4.1%)  | 70 %  | 812 |
| Grain | Carafa                           | 0.3 kg (4.1%)  | 70 %  | 664 |
| Grain | Castle Malting - Jęczmień palony | 0.05 kg (0.7%) | 55 %  | 985 |
| Grain | Czekoladowy                      | 0.3 kg (4.1%)  | 60 %  | 788 |
| Grain | Płatki owsiane                   | 0.4 kg (5.5%)  | 85 %  | 3   |
| Grain | Płatki pszeniczne                | 0.2 kg (2.8%)  | 60 %  | 3   |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Amarillo | 20 g   | 60 min | 9.5 %      |
| Boil    | Amarillo | 20 g   | 30 min | 9.5 %      |
| Boil    | Amarillo | 10 g   | 15 min | 9.5 %      |

|         |          |      |          |       |
|---------|----------|------|----------|-------|
| Dry Hop | Amarillo | 50 g | 3 day(s) | 9.5 % |
|---------|----------|------|----------|-------|

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Fermentis  |