

# American Forest Stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **55**
- SRM **44.5**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 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 **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **8.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount         | Yield | EBC  |
|-------|------------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt               | 1.1 kg (37.9%) | 80 %  | 6    |
| Grain | Strzegom Pilzneński                | 0.7 kg (24.1%) | 80 %  | 4    |
| Grain | Płatki owsiane                     | 0.5 kg (17.2%) | 60 %  | 3    |
| Grain | monachijski karmelowy II Bestmaltz | 0.2 kg (6.9%)  | 78 %  | 120  |
| Grain | Simpsons - Chocolate Malt          | 0.3 kg (10.3%) | 73 %  | 1200 |
| Grain | Jęczmień palony weyermann          | 0.1 kg (3.4%)  | 55 %  | 1200 |

## Hops

| Use for             | Name   | Amount | Time     | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil                | iunga  | 15 g   | 60 min   | 10.3 %     |
| Boil                | Lomik  | 15 g   | 60 min   | 4 %        |
| Aroma (end of boil) | Citra  | 10 g   | 10 min   | 13.1 %     |
| Dry Hop             | mosaic | 10 g   | 3 day(s) | 12.2 %     |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | Fermentis  |

### Extras

| Type   | Name          | Amount | Use for | Time   |
|--------|---------------|--------|---------|--------|
| Flavor | pȩdy  wierku | 30 g   | Boil    | 15 min |
| Fining | whirflock     | 5 g    | Boil    | 15 min |