

# Stout #1

- Gravity **12.4 BLG**
- ABV ---
- IBU **46**
- SRM **40**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **0 %**
- Size with trub loss **14 liter(s)**
- Boil time **30 min**
- Evaporation rate **12 %/h**
- Boil size **15.75 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.85 liter(s)**
- Total mash volume **11.8 liter(s)**

## Steps

- Temp **64 C**, Time **90 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **8.85 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **15.75 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount  | Yield   | EBC  |
|-------|-----------------------------|---------|---------|------|
| Grain | Viking Pale Ale Malt        | 2.6 kg  | 80 %    | 15   |
| Grain | Chocolate Wheat (Weyermann) | 0.15 kg | 75.74 % | 2180 |
| Grain | Viking Caramel 600          | 0.1 kg  | 68 %    | 1600 |
| Grain | Viking Roasted Barley       | 0.1 kg  | 70 %    | 2934 |

## Hops

| Use for | Name         | Amount | Time   | Alpha acid |
|---------|--------------|--------|--------|------------|
| Boil    | Minstrel     | 20 g   | 30 min | 7.7 %      |
| Boil    | Styrian Wolf | 20 g   | 15 min | 11.6 %     |
| Boil    | Minstrel     | 10 g   | 10 min | 7.7 %      |
| Boil    | Styrian Wolf | 10 g   | 0 min  | 11.6 %     |

## Yeasts

| Name               | Type | Form | Amount | Laboratory    |
|--------------------|------|------|--------|---------------|
| SafAle English Ale | Ale  | Dry  | --- g  | DCL/Fermentis |

## Extras

| Type        | Name                     | Amount | Use for | Time   |
|-------------|--------------------------|--------|---------|--------|
| Water Agent | Chlorek Wapnia           | 6.93 g | Mash    | 60 min |
| Water Agent | Sól                      | 3.26 g | Mash    | 60 min |
| Water Agent | Siarczan Magnezu (MgSO4) | 1.75 g | Mash    | 60 min |
| Water Agent | Lactic Acid              | 1 g    | Mash    | 60 min |