

American Stout

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **48**
- SRM **31.9**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (66%) | 80 % | 5 |
| Grain | Słód Caramunich Typ II Weyermann | 0.6 kg (11.3%) | 73 % | 120 |
| Grain | Chocolate Malt (UK) | 0.6 kg (11.3%) | 73 % | 887 |
| Grain | Żytni | 0.6 kg (11.3%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | lunga | 25 g | 60 min | 11.5 % |
| Whirlpool | Centennial | 50 g | 20 min | 10.5 % |
| Dry Hop | Centennial | 150 g | 3 day(s) | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--|------|------|--------|------------|
| Danstar - Windsor Ale | Ale | Dry | 11 g | Danstar |
| Lallemand - Lalbrew London English-style | Ale | Dry | 11 g | Lallemand |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------------|--------|---------|--------|
| Water Agent | CaCl ₂ | 5 g | Mash | 60 min |
| Water Agent | Lactic Acid | 3 g | Mash | 60 min |
| Fining | Whirlflock-T | 2.5 g | Boil | 10 min |