

## #065 American Stout

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **67**
- SRM **43.9**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **19 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **33.6 liter(s)**

### Steps

- Temp **65 C**, Time **40 min**
- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **25.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt       | 3 kg (35.7%)   | 82 %  | 4   |
| Grain | Viking Pale Ale malt      | 3.1 kg (36.9%) | 80 %  | 5   |
| Grain | płatki jęczmienne         | 1 kg (11.9%)   | 60 %  | 4   |
| Grain | Jęczmień palony           | 0.8 kg (9.5%)  | 55 %  | 985 |
| Grain | Weyermann - Chocolate Rye | 0.5 kg (6%)    | 20 %  | 493 |

### Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | Chinook | 20 g   | 60 min   | 11.5 %     |
| Boil    | Chinook | 30 g   | 10 min   | 11.5 %     |
| Boil    | Galaxy  | 30 g   | 10 min   | 16.5 %     |
| Boil    | Idaho 7 | 50 g   | 10 min   | 14.1 %     |
| Dry Hop | Simcoe  | 50 g   | 3 day(s) | 12.9 %     |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 350 ml | Fermentis  |

## Extras

| Type   | Name                       | Amount | Use for | Time   |
|--------|----------------------------|--------|---------|--------|
| Fining | whirfloc T                 | 1.25 g | Boil    | 10 min |
| Other  | pożywka dla drożdży Wyeast | 2 g    | Boil    | 10 min |