

American stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **42**
- SRM **32.8**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **2.5 %**
- Size with trub loss **11.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **14.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **14.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **11 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **14.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|------|
| Grain | Pilzneński | 2.7 kg (85.7%) | 81 % | 4 |
| Grain | Crystal II | 0.1 kg (3.2%) | 70 % | 1024 |
| Grain | Wheat Black | 0.1 kg (3.2%) | --- % | --- |
| Grain | Chocolate Malt (UK) | 0.05 kg (1.6%) | 73 % | 887 |
| Grain | Jęczmień palony | 0.2 kg (6.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil | Simcoe 2019 | 15 g | 60 min | 13.5 % |
| Boil | Centennial | 15 g | 5 min | 8.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|--------|--------|-------------|
| Wyeast - 1056 American Ale | Ale | Liquid | 200 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|---------|--------|---------|--------|
| Water Agent | Pożywka | 1 g | Boil | 10 min |

| | | | | |
|--------|-----------|-------|------|--------|
| Fining | Whirlfloc | 0.5 g | Boil | 10 min |
|--------|-----------|-------|------|--------|