

AmerStout

- Gravity **16.4 BLG**
- ABV ---
- IBU **58**
- SRM **52.9**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.1 liter(s)**
- Total mash volume **8.2 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **6.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **25 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|-----------------------------|----------------|-------|------|
| Liquid Extract | Pale Ale Extract | 3.4 kg (59.1%) | 78 % | 16 |
| Grain | Pale Ale Maris Otter | 1 kg (17.4%) | 81 % | 6 |
| Grain | Płatki owsiane | 0.3 kg (5.2%) | 85 % | 3 |
| Grain | Caraaroma | 0.25 kg (4.3%) | 78 % | 400 |
| Grain | Brown Malt (British) | 0.25 kg (4.3%) | 70 % | 175 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (4.3%) | 68 % | 1200 |
| Adjunct | Jęczmień palony | 0.15 kg (2.6%) | 55 % | 985 |
| Adjunct | Extra black | 0.15 kg (2.6%) | 65 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.5 % |
| Aroma (end of boil) | Citra | 30 g | 15 min | 12 % |
| Dry Hop | Citra | 40 g | 7 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 150 ml | --- |