

American Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **57**
- SRM **35**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.2 liter(s)**
- Total mash volume **37.6 liter(s)**

Steps

- Temp **52 C**, Time **0 min**
- Temp **64 C**, Time **60 min**
- Temp **70 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **28.2 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **0 min** at **52C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **70C**
- Keep mash **5 min** at **76C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **38.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (53.2%) | 80 % | 5 |
| Grain | Karmelowy Czerwony | 1 kg (10.6%) | 75 % | 59 |
| Grain | Viking Vienna Malt | 2 kg (21.3%) | 79 % | 7 |
| Grain | Jęczmień palony | 0.4 kg (4.3%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy 1200 | 0.5 kg (5.3%) | 68 % | 1202 |
| Grain | Płatki owsiane | 0.5 kg (5.3%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Boil | Columbus/Tomahawk/Zeus | 50 g | 20 min | 15.5 % |
| Boil | Columbus/Tomahawk/Zeus | 25 g | 5 min | 15.5 % |
| Aroma (end of boil) | Cascade PL | 50 g | 5 min | 5.2 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 50 g | 3 day(s) | 15.5 % |
| Dry Hop | Cascade PL | 50 g | 3 day(s) | 5.2 % |