

Amercian Stout

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **39**
- SRM **27**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (87%) | 80 % | 5 |
| Grain | karmelowy | 0.2 kg (5.8%) | 70 % | 150 |
| Grain | Czekoladowy | 0.15 kg (4.3%) | 60 % | 800 |
| Grain | Strzegom Barwiący | 0.1 kg (2.9%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Boil | Cascade | 20 g | 5 min | 6 % |