

American Stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **48**
- SRM **33.2**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **24.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **72.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 1 kg (18.9%) | 80 % | 4 |
| Grain | Viking Pale Ale malt | 3 kg (56.6%) | 80 % | 5 |
| Grain | Strzegom Pszeniczny | 0.3 kg (5.7%) | 81 % | 6 |
| Grain | Strzegom Karmel 150 | 0.2 kg (3.8%) | 75 % | 150 |
| Grain | Strzegom Karmel 300 | 0.2 kg (3.8%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (4.7%) | 68 % | 1200 |
| Grain | Strzegom Barwiący | 0.1 kg (1.9%) | 68 % | 1300 |
| Grain | Strzegom Czekoladowy jasny | 0.25 kg (4.7%) | 68 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Citra | 25 g | 60 min | 12 % |
| Boil | Citra | 20 g | 20 min | 12 % |