

American Forest Stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **55**
- SRM **44.5**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **8.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 1.1 kg (37.9%) | 80 % | 6 |
| Grain | Strzegom Pilzneński | 0.7 kg (24.1%) | 80 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (17.2%) | 60 % | 3 |
| Grain | monachijski karmelowy II Bestmaltz | 0.2 kg (6.9%) | 78 % | 120 |
| Grain | Simpsons - Chocolate Malt | 0.3 kg (10.3%) | 73 % | 1200 |
| Grain | Jęczmień palony weyermann | 0.1 kg (3.4%) | 55 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | iunga | 15 g | 60 min | 10.3 % |
| Boil | Lomik | 15 g | 60 min | 4 % |
| Aroma (end of boil) | Citra | 10 g | 10 min | 13.1 % |
| Dry Hop | mosaic | 10 g | 3 day(s) | 12.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 10 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------|--------|---------|--------|
| Flavor | pȩdy świerku | 30 g | Boil | 15 min |
| Fining | whirflock | 5 g | Boil | 15 min |