

American Stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **62**
- SRM **31.1**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.3 kg (68.8%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.7 kg (11.2%) | 79 % | 16 |
| Grain | Weyermann - Carafa I | 0.3 kg (4.8%) | 70 % | 690 |
| Grain | Weyermann Caraaroma | 0.3 kg (4.8%) | 70 % | 400 |
| Grain | Jęczmień palony | 0.25 kg (4%) | 55 % | 985 |
| Grain | Płatki jęczmienne błyskawiczne | 0.4 kg (6.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.5 % |
| Aroma (end of boil) | Sorachi Ace | 20 g | 10 min | 10 % |
| Aroma (end of boil) | Citra | 20 g | 10 min | 12 % |
| Whirlpool | Sorachi Ace | 10 g | 0 min | 10 % |
| Whirlpool | Citra | 10 g | 0 min | 12 % |
| Dry Hop | Sorachi Ace | 20 g | 3 day(s) | 10 % |

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|---------|-------|------|----------|------|
| Dry Hop | Citra | 20 g | 3 day(s) | 12 % |
|---------|-------|------|----------|------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | --- |