

American Stout

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **76**
- SRM **43.3**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

Steps

- Temp **65 C**, Time **80 min**

Mash step by step

- Heat up **24.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **80 min** at **65C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|---------------|-------|------|
| Grain | Strzegom Karmel 150 | 0.2 kg (2.5%) | 75 % | 150 |
| Grain | Weyermann - Pale Ale Malt | 7 kg (86.4%) | 85 % | 7 |
| Grain | Strzegom Czekoladowy 1200 | 0.4 kg (4.9%) | 68 % | 1202 |
| Grain | Jęczmień palony | 0.5 kg (6.2%) | 55 % | 1150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 50 g | 60 min | 15.5 % |
| Boil | Cascade | 15 g | 15 min | 6 % |
| Boil | Centennial | 25 g | 10 min | 10.5 % |
| Boil | Centennial | 25 g | 5 min | 10.5 % |
| Aroma (end of boil) | Cascade | 30 g | 0 min | 6 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 10 g | 5 day(s) | 15.5 % |
| Dry Hop | Centennial | 40 g | 5 day(s) | 10.5 % |
| Dry Hop | Cascade | 45 g | 5 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

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|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|