

# 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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

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