

## American Stout v2

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **36**
- SRM **41.5**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **24.1 liter(s)**

### Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **75.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount        | Yield | EBC  |
|-------|----------------------------------|---------------|-------|------|
| Grain | Weyermann - Pale Ale Malt        | 5 kg (70.4%)  | 85 %  | 7    |
| Grain | Strzegom Czekoladowy ciemny      | 0.5 kg (7%)   | 68 %  | 1200 |
| Grain | Jęczmień palony                  | 0.2 kg (2.8%) | 55 %  | 985  |
| Grain | Płatki jęczmienne                | 0.4 kg (5.6%) | 60 %  | 4    |
| Grain | Słód Caramunich Typ II Weyermann | 0.5 kg (7%)   | 73 %  | 120  |
| Grain | Strzegom Karmel 150              | 0.5 kg (7%)   | 75 %  | 150  |

### Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Azacca  | 30 g   | 45 min   | 14 %       |
| Aroma (end of boil) | Equinox | 15 g   | 0 min    | 13.1 %     |
| Dry Hop             | Equinox | 15 g   | 5 day(s) | 13.1 %     |
| Dry Hop             | Cascade | 30 g   | 5 day(s) | 6 %        |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 23 g   | ---        |