

# American Stout

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **35**
- SRM **31.9**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28.7 liter(s)**
- Total mash volume **36.9 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **28.7 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **35 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale           | 6 kg (73.3%)   | 79 %  | 6    |
| Grain | Pszeniczny                  | 0.2 kg (2.4%)  | 85 %  | 4    |
| Grain | Karmelowy Jasny 30EBC       | 0.5 kg (6.1%)  | 75 %  | 30   |
| Grain | Carafa II                   | 0.2 kg (2.4%)  | 70 %  | 812  |
| Grain | carafa special typ I        | 0.2 kg (2.4%)  | 70 %  | 900  |
| Grain | Jęczmień palony             | 0.2 kg (2.4%)  | 55 %  | 985  |
| Grain | Strzegom Barwiący           | 0.04 kg (0.5%) | 68 %  | 1300 |
| Grain | Płatki pszeniczne           | 0.3 kg (3.7%)  | 85 %  | 3    |
| Grain | Płatki owsiane              | 0.3 kg (3.7%)  | 85 %  | 3    |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (3.1%) | 68 %  | 1200 |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Amarillo | 30 g   | 60 min | 9.5 %      |
| Boil    | Amarillo | 20 g   | 30 min | 9.5 %      |

|                     |        |      |          |      |
|---------------------|--------|------|----------|------|
| Aroma (end of boil) | Mosaic | 25 g | 8 min    | 10 % |
| Dry Hop             | Mosaic | 50 g | 0 day(s) | 10 % |

## Yeasts

| Name         | Type | Form  | Amount  | Laboratory |
|--------------|------|-------|---------|------------|
| Safale US-05 | Ale  | Slant | 1300 ml | ---        |