

# AMERICAN STOUT

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **43**
- SRM **33.4**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **67 C**, Time **80 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **21.1 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **15 min** at **76C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński        | 4 kg (55%)     | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1.2 kg (16.5%) | 79 %  | 16  |
| Grain | Strzegom Pszeniczny        | 0.2 kg (2.8%)  | 81 %  | 6   |
| Grain | Strzegom Karmel 600        | 0.2 kg (2.8%)  | 68 %  | 600 |
| Grain | Caramunich® typ I          | 0.1 kg (1.4%)  | 73 %  | 80  |
| Grain | Weyermann - Carafa I       | 0.27 kg (3.7%) | 70 %  | 690 |
| Grain | Karmelowy żytni Strzegom   | 0.2 kg (2.8%)  | 75 %  | 150 |
| Grain | Jęczmień palony            | 0.3 kg (4.1%)  | 55 %  | 985 |
| Grain | Płatki owsiane             | 0.4 kg (5.5%)  | 85 %  | 3   |
| Grain | Barley, Flaked             | 0.4 kg (5.5%)  | 70 %  | 4   |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 10 g   | 70 min | 12.5 %     |
| Boil    | Citra                  | 15 g   | 40 min | 13.5 %     |
| Boil    | Simcoe                 | 15 g   | 15 min | 11.4 %     |

|      |         |      |        |        |
|------|---------|------|--------|--------|
| Boil | Citra   | 15 g | 10 min | 13.5 % |
| Boil | Ahtanum | 20 g | 5 min  | 3.4 %  |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |

### Extras

| Type   | Name     | Amount | Use for | Time   |
|--------|----------|--------|---------|--------|
| Fining | mech irl | 7 g    | Boil    | 15 min |