

American Stout

- Gravity **18.2 BLG**
- ABV ---
- IBU **56**
- SRM **49.8**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **68 C**, Time **90 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|------|
| Grain | Strzegom Pilzneński | 4.5 kg (69.2%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.6 kg (9.2%) | 79 % | 22 |
| Grain | Jęczmień palony | 0.2 kg (3.1%) | 55 % | 985 |
| Grain | Oats, Flaked | 0.3 kg (4.6%) | 80 % | 2 |
| Grain | Rye, Flaked | 0.3 kg (4.6%) | 78.3 % | 4 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (4.6%) | 68 % | 1200 |
| Grain | Strzegom Karmel 600 | 0.3 kg (4.6%) | 68 % | 601 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |
| Boil | Citra | 25 g | 20 min | 13.5 % |
| Boil | Citra | 25 g | 10 min | 13.5 % |
| Whirlpool | Citra | 25 g | 0 min | 13.5 % |
| Dry Hop | Citra | 25 g | 5 day(s) | 13.5 % |
| Boil | Amarillo | 12.5 g | 10 min | 8.9 % |
| Whirlpool | Amarillo | 12.5 g | 0 min | 8.9 % |

| | | | | |
|-----------|----------|--------|----------|-------|
| Dry Hop | Amarillo | 25 g | 5 day(s) | 8.9 % |
| Boil | Mosaic | 12.5 g | 10 min | 12 % |
| Whirlpool | Mosaic | 12.5 g | 0 min | 12 % |
| Dry Hop | Mosaic | 12.5 g | 5 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|-------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Slant | 150 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------------|--------|---------|------|
| Water Agent | Lactic Acid | 4 g | Mash | --- |
| Water Agent | Calcium Carbonate | 4 g | Mash | --- |