

Amerykaske Ciemne

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **33**
- SRM **26.6**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **97 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.9 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Monachijski | 2 kg (35.1%) | 80 % | 16 |
| Grain | Strzegom Wiedeński | 3 kg (52.6%) | 79 % | 10 |
| Grain | Fawcett - Pale Chocolate | 0.5 kg (8.8%) | 71 % | 600 |
| Grain | Weyermann - Carafa II | 0.2 kg (3.5%) | 70 % | 837 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |
| Boil | Cascade PL | 20 g | 15 min | 5.2 % |

Yeasts

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