

Czekoladowy stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **19**
- SRM **45.5**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **42 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **31.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **29.6 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 8 kg (66.7%) | 80 % | 5 |
| Grain | Strzegom Czekoladowy ciemny | 1 kg (8.3%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.5 kg (4.2%) | 55 % | 985 |
| Sugar | laktoza | 1.5 kg (12.5%) | --- % | --- |
| Grain | Strzegom Czekoladowy jasny | 1 kg (8.3%) | 68 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 50 g | 60 min | 4 % |
| Boil | Lublin (Lubelski) | 50 g | 45 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 23 g | Safale |