

polish dry stout 10-11

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **34**
- SRM **31.6**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **72 C**, Time **60 min**
- Temp **80 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **80C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|------|
| Grain | Strzegom Pilzniejszy | 2.15 kg (39.1%) | 80 % | 4 |
| Grain | Caramel/Crystal Malt - 10L | 1.7 kg (30.9%) | 75 % | 20 |
| Grain | Bestmalz Red X | 1.15 kg (20.9%) | 79 % | 80 |
| Grain | Carafa III | 0.5 kg (9.1%) | 70 % | 1034 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | iunga | 30 g | 60 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Flavor | espresso | 100 g | Boil | 60 min |