

Dry Stout 12 blg ctz/oktawia

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **28.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **31.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **21.9 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **31.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------------|----------------|-------|------|
| Grain | Viking Pilsner malt | 2.2 kg (39.3%) | 82 % | 4 |
| Grain | Viking Pale Ale malt | 2.2 kg (39.3%) | 80 % | 5 |
| Grain | Special B Castle | 0.3 kg (5.4%) | 70 % | 350 |
| Grain | Simpsons - Roasted Barley | 0.2 kg (3.6%) | 70 % | 1600 |
| Adjunct | Platki owsiane | 0.5 kg (8.9%) | 85 % | 3 |
| Grain | Simpsons - Chocolate Malt | 0.2 kg (3.6%) | 73 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus US | 15 g | 60 min | 15.5 % |
| Aroma (end of boil) | Oktawia | 15 g | 10 min | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|--------|--------|------------|
| Safale S-04 | Ale | Liquid | 200 ml | FERMENTIS |