

Smoked Rye Stout

- Gravity **10.1 BLG**
- ABV ---
- IBU **46**
- SRM **40**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **17.5 liter(s)**

Steps

- Temp **40 C**, Time **10 min**
- Temp **64 C**, Time **50 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **42.5C**
- Add grains
- Keep mash **10 min** at **40C**
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|----------------|-------|------|
| Grain | Pale Ale | 2.5 kg (71.4%) | 80 % | 5 |
| Grain | Żytni wędzony Stainbach | 0.5 kg (14.3%) | 80 % | 10 |
| Grain | Extra black | 0.5 kg (14.3%) | 65 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 15 g | 60 min | 12 % |
| Boil | lunga | 15 g | 60 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|------|
| Water Agent | Gips piwowarski | 10 g | Mash | --- |