

smoked stout

- Gravity **18.2 BLG**
- ABV ---
- IBU **33**
- SRM **40**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **54 C**, Time **20 min**
- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **20 min** at **54C**
- Keep mash **45 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **21.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|--------------|--------|------|
| Grain | steinbach smoked malt | 3 kg (60%) | --- % | 5 |
| Grain | pilzeński | 1.5 kg (30%) | 80.5 % | 2 |
| Grain | czekoladowy | 0.5 kg (10%) | 60 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Marynka | 10 g | 60 min | 10 % |
| Boil | Marynka | 10 g | 45 min | 10 % |
| Boil | Marynka | 10 g | 30 min | 10 % |
| Boil | Fuggles | 10 g | 15 min | 4.5 % |
| Aroma (end of boil) | Fuggles | 10 g | 5 min | 4.5 % |
| Dry Hop | Fuggles | 10 g | 3 day(s) | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| saf | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|--------------|--------|---------|----------|
| Flavor | wióry dębowe | 200 g | Primary | 3 day(s) |