

Luke Chopie!

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **30**
- SRM **6.6**
- Style **Other Smoked Beer**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **18 %/h**
- Boil size **16.2 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **15.2 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **4.8 liter(s)** of **76C** water or to achieve **16.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Słód Wędzony Steinbach | 2.8 kg (73.7%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ II | 0.7 kg (18.4%) | 79 % | 22 |
| Grain | Żytni | 0.3 kg (7.9%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 20 g | 30 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|-------|-------|--------|------------|
| Wyeast - Munich Lager | Lager | Slant | 100 ml | Wyeast |