

German Lager

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **22**
- SRM **7**
- Style **German Pilsner (Pils)**

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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **85 C**, Time **1 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **85C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-------------|-------|-----|
| Grain | Strzegom Monachijski typ I | 4 kg (100%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|----------|------------|
| Boil | Lomik | 30 g | 60 min | 6.2 % |
| Dry Hop | Saaz (Czech Republic) | 40 g | 7 day(s) | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------|-------|------|--------|------------|
| SAFLAGER S-189 | Lager | Dry | 11.5 g | Fermentis |