

Pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **51**
- SRM **5.7**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **7 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **56C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|------------|-------|-----|
| Grain | Strzegom Pilzneński | 4 kg (80%) | 80 % | 4 |
| Grain | Strzegom Karmel 30 | 1 kg (20%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Magnum | 30 g | 80 min | 13.5 % |
| Boil | Tradition | 30 g | 10 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 11.5 g | Fermentis |