

Munich Helles

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **16**
- SRM **4.5**
- Style **Munich Helles**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 3.5 kg (77.8%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (22.2%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Northern Brewer | 15 g | 60 min | 9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|-------|------|--------|------------|
| Gozdawa German Lager W35 | Lager | Dry | 10 g | --- |