

Mj

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **21**
- SRM **3.6**
- Style **Munich Helles**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **66 min**
- Evaporation rate **10 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|-----------------|--------|-----|
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 4.69 kg (88.6%) | 80 % | 4 |
| Grain | Weyermann - Carapils | 0.57 kg (10.8%) | 78 % | 4 |
| Grain | Acid Malt | 0.03 kg (0.5%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|---------|--------|------------|
| Boil | Marynka | 14.35 g | 60 min | 10 % |
| Boil | Lublin (Lubelski) | 19.13 g | 30 min | 4 % |
| Boil | Lublin (Lubelski) | 9.57 g | 1 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------|--------|-----------|------------|
| munich lager | Lager | Liquid | 119.57 ml | wyest |