

Monachijskie Ciemne

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **9.1**
- Style **Munich Dunkel**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **60 min** at **64C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|-------------|-------|-----|
| Grain | Monachijski typ II 20-25 EBC Weyermann | 5 kg (100%) | 80 % | 20 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------------------|--------|--------|------------|
| Boil | Magnum | 12 g | 60 min | 13.5 % |
| Boil | Hallertau Mittelfruh | 20 g | 10 min | 4.6 % |
| Whirlpool | Hallertau Mittelfruh | 30 g | 10 min | 4.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|------|-------|--------|------------|
| Lallemand - Diamond Lager | Ale | Slant | 100 ml | Lallemand |