

MC

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **12**
- SRM **15.8**
- Style **Munich Dunkel**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.7 liter(s)**
- Total mash volume **22.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	0.92 kg (16.5%)	81 %	4
Grain	Monachijski	4.28 kg (76.9%)	80 %	16
Grain	Caraaroma	0.12 kg (2.2%)	78 %	400
Grain	Melanoiden Malt	0.12 kg (2.2%)	80 %	39
Grain	Barwiący	0.12 kg (2.2%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30.56 g	50 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	12.22 g	0 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
munich lager	Lager	Liquid	183.33 ml	wyest