März in München

- Gravity **14.3 BLG**
- ABV **---**
- IBU **21**
- SRM **5.6**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **21.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg *(68.5%)*	81 %	4
Grain	Strzegom Wiedeński	1 kg *(13.7%)*	79 %	10
Grain	Monachijski	1 kg *(13.7%)*	80 %	16
Grain	Carahell	0.3 kg *(4.1%)*	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Aroma (end of boil)	Tettnang	20 g	5 min	4 %
Whirlpool	Tettnang	10 g	0 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	1000 ml	Fermentum Mobile

Notes

- UWAGA NR 1 :
  PODGRZEWANIE Z 62°C DO 72°C - 5 min LUB DEKOKCJA Z 5 L
  PODGRZEWANIE Z 72°C DO 76°C - 2 min
  WYSŁADZANIE 76°C

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MOC PALNIKA - 6500 W
Nov 30, 2016, 12:10 AM

- UWAGA NR 2 :
  WODA DO WYSŁADZANIA - 14,56 L
  ILOŚĆ BRZECZKI DO GOTOWANIA - 35,00 L
  ILOŚĆ WODY ZUŻYTEJ DO CAŁEGO PROCESU - 42,30 L
  STRATY NA ODPAROWANIE - 8,31 L
  Nov 30, 2016, 12:10 AM
- UWAGA NR 3 :
  FERMENTACJA
  DROŻDŻE S-23 ZADANE W TEMP. 13°C
  FERMENTACJA TEMP ok 10°C 14 dni
  CICHA FERMENTACJA 5°C 14 dni
  LAŻAKOWANIE W TEMP. 5 °C
  Nov 30, 2016, 12:10 AM

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