Munich Helles

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **4.6**
- Style **Munich Helles**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **51.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **29.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **78.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **41.6 liter(s)** of **76C** water or to achieve **51.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	7.6 kg *(77.6%)*	80 %	4
Grain	Strzegom Monachijski typ I	1.8 kg *(18.4%)*	79 %	16
Grain	Strzegom Pszeniczny	0.4 kg *(4.1%)*	81 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	47 g	60 min	7.8 %
Boil	Lublin (Lubelski)	50 g	10 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Slant	160 ml	Fermentis Division of S.I.Lesaffre

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.