

Kellerbier

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **31**
- SRM **6.6**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **17.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.4 liter(s)**
- Total mash volume **12.5 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **9.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **17.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (79.9%)	81 %	4
Grain	Żytni	0.45 kg (14.4%)	85 %	8
Grain	Słód Caramunich Typ II Weyermann	0.18 kg (5.8%)	73 %	120

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	25 g	60 min	5 %
Boil	Hallertau Tradition	20 g	15 min	5 %
Boil	Hallertau Tradition	20 g	0 min	5 %