

## #11 Lager Wiedeński

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **35**
- SRM **5**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **54 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **14.8 liter(s)** of strike water to **59.2C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.5 kg (55.6%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (22.2%)	79 %	10
Grain	Strzegom Monachijski typ I	1 kg (22.2%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Citra	10 g	30 min	12 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	5 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-23	Lager	Dry	11.5 g	Safbrew

### Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	5 g	Boil	5 min
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