

## red v. lager

- Gravity **12.9 BLG**
- ABV ---
- IBU **24**
- SRM **10.4**
- Style **Vienna Lager**

### 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 **5 %/h**
- Boil size **23.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **16.6 liter(s)**

### Steps

- Temp **65 C**, Time **1 min**
- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **12.2 liter(s)** of strike water to **69.7C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **1 min** at **65C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	3.43 kg (76.2%)	79 %	10
Grain	Monachijski	0.64 kg (14.2%)	80 %	16
Grain	Karmelowy Czerwony	0.43 kg (9.6%)	75 %	59

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Brewers Gold	19 g	60 min	7.6 %
Boil	Saaz (Czech Republic)	21 g	20 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP800 - Pilsner Lager Yeast	Lager	Liquid	20 ml	White Labs