

## Brown/Red Lager

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **15**
- SRM **12**
- Style **Vienna Lager**

### Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.4 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **37 liter(s)**

### Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **21.3 liter(s)**

### Steps

- Temp **67 C**, Time **50 min**
- Temp **74 C**, Time **5 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **5 min** at **74C**
- Sparge using **24.3 liter(s)** of **76C** water or to achieve **37 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1.72 kg (40.4%)	79 %	10
Grain	Pilzneński	1.72 kg (40.4%)	81 %	4
Grain	BESTMALZ - Best Melanoidin	0.43 kg (10.1%)	75 %	71
Grain	Caramel/Crystal Malt - 120L	0.3 kg (7%)	72 %	236
Grain	Jęczmień palony	0.09 kg (2.1%)	55 %	1000

Na koniec zacierania przy podgrzaniu

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Mittelfruh	43.1 g	63 min	3 %
Aroma (end of boil)	Hallertau Mittelfruh	38.79 g	8 min	3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lager trasy Diamond Lallemend	Lager	Dry	17.24 g	---

### Notes

- Palony jęczmień dodany po zatarciu , po podgrzaniu do 74 stopni Celsjusza  
Kolor bardziej brązowy, wyszedł  
można użyć siodu karmelowego 50 do 60 EBC być może bardziej będzie czerwony.  
*Dec 23, 2021, 3:38 PM*