

# czerwony lager

- Gravity **12.1 BLG**
- ABV ---
- IBU **31**
- SRM **19.4**
- Style **Vienna Lager**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **16 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **68 C**, Time **50 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **11.2 liter(s)** of strike water to **56C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **50 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **7.6 liter(s)** of **76C** water or to achieve **16 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1 kg (35.7%)	--- %	10
Grain	Karmelowy Czerwony	0.2 kg (7.1%)	75 %	59
Grain	Strzegom Karmel 600	0.1 kg (3.6%)	68 %	601
Grain	Strzegom Monachijski typ II	0.5 kg (17.9%)	--- %	22
Grain	Strzegom Monachijski typ I	1 kg (35.7%)	--- %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	8 g	60 min	10 %
Boil	lunga	8 g	30 min	11 %
Boil	Lublin (Lubelski)	10 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
brewmasters lager	Lager	Dry	10 g	brewmasters

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	60 min
Water Agent	chlorek wapnia	4 g	Mash	---
Flavor	suszona żurawina	50 g	Boil	20 min