

Red Lager

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **25**
- SRM **7**
- Style **Standard American Lager**

Batch size

- Expected quantity of finished beer **80 liter(s)**
- Trub loss **5 %**
- Size with trub loss **84 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **101.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **66.5 liter(s)**
- Total mash volume **85.5 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **5 C**, Time **76 min**

Mash step by step

- Heat up **66.5 liter(s)** of strike water to **2.9C**
- Add grains
- Keep mash **76 min** at **5C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **53.7 liter(s)** of **76C** water or to achieve **101.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	14 kg (73.7%)	80 %	4
Grain	wiking red aktive	3 kg (15.8%)	75 %	40
Grain	Karmelowy Czerwony	1 kg (5.3%)	75 %	59
Grain	Strzegom Monachijski typ I	1 kg (5.3%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	70 g	60 min	12 %
Aroma (end of boil)	Crystal	100 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
s 23	Lager	Dry	45 g	---