Cascade Lager

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **33**
- SRM **2.8**
- Style **Premium American Lager**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **20 %/h**
- Boil size **27.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	1 kg *(21.3%)*	80 %	16
Grain	słód pilzneński	3.7 kg *(78.7%)*	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	50 g	60 min	5.8 %
Whirlpool	Cascade	50 g	0 min	5.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis safale w-34/70	Lager	Dry	11 g	---

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.