lager am

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **30**
- SRM **3.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **20 min** at **72C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	4 kg *(76.9%)*	80.5 %	2
Grain	Pszeniczny	0.5 kg *(9.6%)*	85 %	4
Grain	Monachijski	0.5 kg *(9.6%)*	80 %	16
Grain	Weyermann - Acidulated Malt	0.2 kg *(3.8%)*	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Citra	30 g	30 min	12 %
Whirlpool	Amarillo	50 g	0 min	9.5 %
Whirlpool	Citra	20 g	0 min	12 %
Dry Hop	citra	50 g	5 day(s)	12 %
Dry Hop	Amarillo	100 g	5 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
safale w34	Lager	Slant	200 ml	---

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