

American Lager

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **4.1**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **80 liter(s)**
- Trub loss **5 %**
- Size with trub loss **84 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **102.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **72 liter(s)**
- Total mash volume **90 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **72 liter(s)** of strike water to **56C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **48.7 liter(s)** of **76C** water or to achieve **102.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	12 kg (66.7%)	80 %	4
Grain	Strzegom Wiedeński	5.2 kg (28.9%)	79 %	10
Grain	Pszeniczny	0.8 kg (4.4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	100 g	60 min	5.2 %
Boil	Citra	20 g	15 min	12.8 %
Boil	Cascade	20 g	15 min	5.8 %
Boil	Pacific	50 g	5 min	3.1 %
Boil	citra	30 g	5 min	12.8 %
Boil	Cascade	30 g	5 min	5.8 %
Boil	Centennial	50 g	5 min	8.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Saflager W 34/70	Lager	Slant	400 ml	Fermentis
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