

New wave lager

- Gravity **12.9 BLG**
- ABV ---
- IBU **53**
- SRM **5.1**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **30 min** at **68C**
- Keep mash **2 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (87%)	81 %	4
Grain	Briess - Carapils Malt	0.3 kg (6.5%)	74 %	3
Grain	Strzegom Karmel 30	0.3 kg (6.5%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	60 min	15 %
Boil	Galaxy	10 g	20 min	15 %
Aroma (end of boil)	Citra	10 g	20 min	12 %
Aroma (end of boil)	Chinook	10 g	20 min	13 %
Aroma (end of boil)	Galaxy	10 g	5 min	15 %
Aroma (end of boil)	Citra	10 g	5 min	12 %
Aroma (end of boil)	Chinook	10 g	5 min	13 %
Whirlpool	Galaxy	20 g	5 min	15 %
Whirlpool	Citra	20 g	5 min	12 %
Whirlpool	Chinook	20 g	5 min	13 %
Dry Hop	Chinook	30 g	3 day(s)	13 %

Dry Hop	Citra	30 g	3 day(s)	12 %
Dry Hop	Galaxy	30 g	3 day(s)	15 %
Whirlpool	Jarrylo	17 g	5 min	15 %
Dry Hop	Mandarina bavaria	30 g	3 day(s)	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min