

Teutonic Atomic

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **37**
- SRM **3.6**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **26.9 liter(s)**
- Total mash volume **31.8 liter(s)**

Steps

- Temp **63 C**, Time **90 min**
- Temp **71 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **26.9 liter(s)** of strike water to **66.9C**
- Add grains
- Keep mash **90 min** at **63C**
- Keep mash **30 min** at **71C**
- Keep mash **10 min** at **78C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Rahr - Premium Pilsner Malt	4.1 kg (83.7%)	80 %	3
Grain	Strzegom Monachijski typ I	0.5 kg (10.2%)	79 %	16
Grain	Weyermann - Carapils	0.3 kg (6.1%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	60 min	11.6 %
Boil	Ahtanum	10 g	20 min	4.7 %
Boil	Amarillo	10 g	20 min	7.7 %
Boil	Ahtanum	15 g	10 min	4.7 %
Boil	Amarillo	15 g	10 min	7.7 %
Aroma (end of boil)	Ahtanum	15 g	5 min	4.7 %
Aroma (end of boil)	Amarillo	15 g	5 min	7.7 %
Aroma (end of boil)	Citra	35 g	0 min	11.6 %
Aroma (end of boil)	Ahtanum	10 g	0 min	4.7 %

Aroma (end of boil)	Amarillo	10 g	0 min	7.7 %
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Yeasts

Name	Type	Form	Amount	Laboratory
WLP838 - Southern German Lager Yeast	Lager	Liquid	250 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	2 g	Boil	15 min