

Galaxy Pale Ale

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **28**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **21.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (70%)	81 %	4
Grain	BESTMALZ - Best Heidelberg Wheat Malt	1 kg (20%)	82 %	3
Grain	Castlemalting - Cara Clair	0.25 kg (5%)	78 %	4
Grain	Abbey Castle	0.25 kg (5%)	80 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	30 g	20 min	15 %
Aroma (end of boil)	Galaxy	30 g	0 min	15 %
Whirlpool	Galaxy	40 g	0 min	15 %
Dry Hop	Galaxy	100 g	3 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	5 g	Mash	60 min
Water Agent	Lactic Acid	5 g	Mash	60 min
Fining	Whirlfloc	2.5 g	Boil	10 min