

Singiel Galaxy

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **20**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.4 liter(s)**
- Total mash volume **8.6 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **6.4 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	1.8 kg (83.7%)	80.5 %	4
Grain	Carahell	0.15 kg (7%)	77 %	26
Grain	Pszeniczny	0.2 kg (9.3%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Galaxy	10 g	20 min	15 %
Whirlpool	Galaxy	30 g	0 min	15 %
Dry Hop	Galaxy	70 g	5 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Liquid	1000 ml	White Labs