

# galaxy single

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **48**
- SRM **4.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

## Steps

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

## Mash step by step

- Heat up **14.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.3 kg (87.8%)	79 %	6
Grain	Strzegom Karmel 30	0.3 kg (6.1%)	75 %	30
Grain	Pszeniczny	0.3 kg (6.1%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	13 g	60 min	15.5 %
Boil	Galaxy	10 g	15 min	13.3 %
Boil	Galaxy	15 g	10 min	13.3 %
Aroma (end of boil)	Galaxy	15 g	0 min	13.3 %
Whirlpool	Galaxy	20 g	30 min	13.3 %
Dry Hop	Galaxy	40 g	7 day(s)	13.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis