

# Grejpfrut Sour Ale

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **13**
- SRM **2.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **80 C**, Time **5 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **80C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	2.7 kg (77.1%)	80.5 %	2
Grain	Pszeniczny	0.7 kg (20%)	85 %	4
Grain	Strzegom Karmel 30	0.1 kg (2.9%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	20 g	60 min	4 %
Boil	Lublin (Lubelski)	15 g	20 min	4 %
Aroma (end of boil)	Cascade	50 g	0 min	6 %
Aroma (end of boil)	Amarillo	50 g	0 min	9.5 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	Koncentrat grejpfrut	2000 g	Primary	14 day(s)