

# Freak Show IPA

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **69**
- SRM **7.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **0 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (93.8%)	80 %	5
Grain	Weyermann - Carared	0.2 kg (3.1%)	75 %	45
Grain	Strzegom Karmel 150	0.2 kg (3.1%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	50 g	30 min	10 %
Boil	Mosaic	70 g	5 min	10 %
Boil	Magnum	20 g	60 min	11.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	10 g	---

## Notes

- Użyte chmielę to Mix wszystkich resztek. Odpowiednio na goryczkę smak i aromat.  
*Jul 18, 2018, 11:40 AM*