

# Griffin Feather

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- Gravity **33.9 BLG**
- ABV ---
- IBU **12**
- SRM **53.6**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **4 %/h**
- Boil size **14.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

## Steps

- Temp **53 C**, Time **12 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **10.8 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **12 min** at **53C**
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **7.6 liter(s)** of **76C** water or to achieve **14.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	Liquid Extract (LME) - Pilsner	3 kg (42.3%)	78 %	8
Grain	Caramel/Crystal Malt - 120L	1 kg (14.1%)	72 %	236
Grain	Briess - Munich Malt 10L	1 kg (14.1%)	77 %	20
Grain	Barley, Flaked	0.6 kg (8.5%)	70 %	4
Grain	Barley, Raw	0.5 kg (7%)	60.9 %	4
Grain	Grodziski pszeniczny wędzony dębem	0.3 kg (4.2%)	80 %	3
Grain	Briess - Dark Chocolate Malt	0.2 kg (2.8%)	60 %	827
Sugar	Brown Sugar, Dark	0.5 kg (7%)	100 %	99

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	10 g	45 min	7 %

Boil	Perle	10 g	30 min	7 %
Boil	perle	10 g	15 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's