

# Freestyle Luzgrafgot

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **30**
- SRM **3.4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **6.6 liter(s)**
- Total mash volume **8.5 liter(s)**

## Steps

- Temp **68 C**, Time **50 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **6.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **1 min** at **77C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type           | Name                   | Amount         | Yield | EBC |
|----------------|------------------------|----------------|-------|-----|
| Grain          | Simpsons - Maris Otter | 1.4 kg (29.2%) | 81 %  | 6   |
| Grain          | Oats, Flaked           | 0.5 kg (10.4%) | 80 %  | 2   |
| Liquid Extract | Honey                  | 1.9 kg (39.6%) | 75 %  | 2   |
| Liquid Extract | aple                   | 1 kg (20.8%)   | 100 % | 4   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | horizon | 20 g   | 60 min | 12.9 %     |
| Boil    | Crystal | 20 g   | 15 min | 4.5 %      |
| Boil    | Crystal | 10 g   | 1 min  | 4.5 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 11.5 g | ---        |

## Extras

| Type  | Name             | Amount | Use for | Time     |
|-------|------------------|--------|---------|----------|
| Other | sok jablkowy 10% | 6500 g | Primary | 8 day(s) |