

Target Single Hop

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **55**
- SRM **4.9**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **23.6 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **30 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 **62 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|--------|-----|
| Grain | Pale Malt (2 Row) US | 6 kg (93.6%) | 79 % | 4 |
| Grain | Platki owsiane | 0.11 kg (1.7%) | 85 % | 3 |
| Grain | BESTMALZ - Best Melanoidin | 0.2 kg (3.1%) | 75 % | 71 |
| Grain | Acid Malt | 0.1 kg (1.6%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|--------|------------|
| Boil | Target | 30 g | 60 min | 11.5 % |
| Boil | Target | 33 g | 25 min | 11.5 % |
| Whirlpool | Target | 33 g | 0 min | 11.5 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|------------|-----|------|--------|
| Fining | Irish Moss | 5 g | Boil | 15 min |
|--------|------------|-----|------|--------|