

IPA BUNKIER

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **42**
- SRM **5.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **75.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **58.7 liter(s)**
- Total mash volume **78.3 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **58.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **36.8 liter(s)** of **76C** water or to achieve **75.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 9.5 kg (48.5%) | 80 % | 5 |
| Grain | Viking Pilsner malt | 8.5 kg (43.4%) | 82 % | 4 |
| Grain | Viking Wheat Malt | 1 kg (5.1%) | 83 % | 5 |
| Grain | Viking Munich Malt | 0.5 kg (2.6%) | 78 % | 18 |
| Grain | Caraaroma | 0.075 kg (0.4%) | 78 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|----------|------------|
| Boil | Centennial | 75 g | 50 min | 10.5 % |
| Boil | Cascade | 75 g | 50 min | 6 % |
| Boil | East Kent Goldings | 25 g | 10 min | 5.1 % |
| Boil | Amarillo | 50 g | 5 min | 9.5 % |
| Dry Hop | Cascade | 100 g | 7 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 60 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|------|----------------|--------|-----------|----------|
| Herb | Liście limonki | 75 g | Secondary | 7 day(s) |