

A Bigger Bang

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **48**
- SRM **6.4**
- Style **American IPA**

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 **21.5 liter(s)**
- Total mash volume **27.7 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **21.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (81.3%) | 80 % | 5 |
| Grain | Weyermann - Carapils | 0.25 kg (4.1%) | 78 % | 4 |
| Grain | Weyermann - Carared | 0.25 kg (4.1%) | 75 % | 45 |
| Grain | Weyermann - Melanoiden Malt | 0.25 kg (4.1%) | 81 % | 53 |
| Grain | płatki jęczmienne | 0.2 kg (3.3%) | 60 % | 4 |
| Grain | Płatki owsiane | 0.2 kg (3.3%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Simcoe | 20 g | 45 min | 13.2 % |
| Boil | Simcoe | 10 g | 20 min | 13.2 % |
| Boil | Amarillo | 10 g | 20 min | 9.5 % |
| Aroma (end of boil) | Simcoe | 10 g | 0 min | 13.2 % |
| Aroma (end of boil) | Amarillo | 10 g | 0 min | 9.5 % |
| Aroma (end of boil) | Cascade | 10 g | 0 min | 6 % |

| | | | | |
|---------------------|----------|------|----------|--------|
| Aroma (end of boil) | Citra | 20 g | 0 min | 12 % |
| Whirlpool | Simcoe | 10 g | 15 min | 13.2 % |
| Whirlpool | Amarillo | 10 g | 15 min | 9.5 % |
| Whirlpool | Cascade | 10 g | 15 min | 6 % |
| Whirlpool | Citra | 10 g | 15 min | 12 % |
| Dry Hop | Simcoe | 40 g | 3 day(s) | 13.2 % |
| Dry Hop | Citra | 10 g | 3 day(s) | 12 % |
| Dry Hop | Amarillo | 10 g | 3 day(s) | 9.5 % |
| Dry Hop | Cascade | 20 g | 3 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|--------|--------|------------|
| fm 54 | Ale | Liquid | 40 ml | --- |