

IPA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **43**
- SRM **6.5**
- 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 **5 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **25.5 liter(s)** of strike water to **71.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **4.9 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 (98%) | 80 % | 5 |
| Grain | Strzegom Karmel 300 | 0.1 kg (2%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Mandarina Bavaria | 10 g | 60 min | 7.5 % |
| Boil | Mandarina Bavaria | 10 g | 30 min | 7.5 % |
| Boil | Mandarina Bavaria | 10 g | 5 min | 7.5 % |
| Aroma (end of boil) | Mandarina Bavaria | 20 g | 1 min | 7.5 % |
| Boil | Cascade | 20 g | 60 min | 5.8 % |
| Boil | Cascade | 20 g | 30 min | 5.8 % |
| Boil | Cascade | 20 g | 5 min | 5.8 % |
| Aroma (end of boil) | Cascade | 40 g | 1 min | 5.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | --- |