

HPL IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **67**
- SRM **4.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (57.4%) | 80 % | 5 |
| Grain | Pilzneński Castlemalting | 2 kg (32.8%) | 81 % | 3.4 |
| Grain | Pszeniczny | 0.4 kg (6.6%) | 85 % | 4 |
| Grain | Strzegom Karmel 30 | 0.2 kg (3.3%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Amarillo | 30 g | 60 min | 8.6 % |
| Boil | Columbus/Tomahawk/Zeus | 25 g | 60 min | 16.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------|--------|---------|--------|
| Water Agent | gips | 10 g | Mash | 60 min |
| Fining | mech | 5 g | Boil | 15 min |