

PL IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **33**
- SRM **4.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **22.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **22.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.3 kg (91.5%) | 80 % | 5 |
| Grain | Cookie | 0.2 kg (4.3%) | --- % | --- |
| Grain | Strzegom Karmel 30 | 0.2 kg (4.3%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil | Lomik | 50 g | 60 min | 3.8 % |
| Boil | Izabella | 50 g | 5 min | 5.1 % |
| Whirlpool | Zula | 50 g | 5 min | 8.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M36 Liberty Bell Ale | Ale | Dry | 10 g | Mangrove Jack's |