

MPPD2020

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **44**
- SRM **4.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilzneński | 5 kg (73.5%) | 81 % | 4 |
| Grain | Płatki pszeniczne | 1 kg (14.7%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.8 kg (11.8%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------------|--------|--------|------------|
| Boil | Nelson Sauvín | 50 g | 15 min | 11 % |
| Whirlpool | Nelson Sauvín | 50 g | 30 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|---------|------------|
| Wlp4627- Funktown Pale Ale | Ale | Liquid | 1000 ml | wlp |