

Lekka ne ipa z modyfikacją wody

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **11**
- SRM **4.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29.2 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 2 kg (30.3%) | 80 % | 4 |
| Grain | Pszeniczny | 1 kg (15.2%) | 85 % | 4 |
| Grain | Viking Pale Ale malt | 2 kg (30.3%) | 80 % | 5 |
| Grain | Płatki pszeniczne | 0.4 kg (6.1%) | 60 % | 3 |
| Grain | Jęczmień niesłodowany | 0.4 kg (6.1%) | 75 % | 2 |
| Grain | Briess - 2 Row Carapils Malt | 0.4 kg (6.1%) | 75 % | 3 |
| Grain | Strzegom Wiedeński | 0.4 kg (6.1%) | 79 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------------|--------|----------|------------|
| Boil | Centennial | 15 g | 30 min | 10.5 % |
| Aroma (end of boil) | Centennial | 40 g | 0 min | 10.5 % |
| Whirlpool | Mosaic | 50 g | 0 min | 10 % |
| Whirlpool | Amarillo | 30 g | 0 min | 9.5 % |
| Dry Hop | Nelson Sauvign | 60 g | 5 day(s) | 11 % |
| Dry Hop | Amarillo | 30 g | 5 day(s) | 9.5 % |

| | | | | |
|------------|------------|------|----------|--------|
| Dry Hop | Mosaic | 50 g | 5 day(s) | 10 % |
| First Wort | Centennial | 10 g | 0 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM55 Zielone Wzgórze | Ale | Slant | 200 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|------|
| Water Agent | chlorek wapnia | 10 g | Mash | --- |
| Water Agent | kwas fosforowy | 5 g | Mash | --- |
| Water Agent | gips | 5 g | Mash | --- |