

Szufla

- Gravity **12 BLG**
- ABV ---
- IBU **31**
- SRM **6.5**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **50 C**, Time **30 min**
- Temp **68 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **45 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.5 kg (90%) | 80 % | 4 |
| Grain | Strzegom Bursztynowy | 0.5 kg (10%) | 70 % | 49 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | Marynka | 20 g | 50 min | 10 % |
| Aroma (end of boil) | Pacific Gem | 20 g | 10 min | 15.3 % |
| Whirlpool | Motueka | 30 g | 0 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 150 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 15 min |