

Dżiraffa Urodzinowa

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **11**
- SRM **2.9**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 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 **3.68 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.2 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **8.8 liter(s)** of strike water to **67.7C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **70 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 1.7 kg (41.5%) | 80 % | 4 |
| Adjunct | Pszenica niesłodowana | 1.7 kg (41.5%) | 75 % | 3 |
| Grain | Płatki owsiane | 0.4 kg (9.8%) | 85 % | 3 |
| Grain | Słód diastatyczny | 0.3 kg (7.3%) | 80 % | 2.5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 25 g | 60 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11.5 g | Safbrew |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------------|--------|---------|--------|
| Flavor | Curaçao | 20 g | Boil | 10 min |
| Flavor | Kolendra Indyjska | 15 g | Boil | 10 min |

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|--------|----------------------------|-------|------|--------|
| Flavor | Skórka słodkiej pomarańczy | 30 g | Boil | 10 min |
| Flavor | Skórka świeżej pomarańczy | 18 g | Boil | 0 min |
| Flavor | Świeża pomarańcza | 130 g | Boil | 0 min |
| Flavor | Skórka świeżej mandarynki | 8 g | Boil | 0 min |