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

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

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