

Mandaryn

- Gravity **19.8 BLG**
- ABV **8.7 %**
- IBU **32**
- SRM **8.3**
- Style **Saison**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	4 kg (48.8%)	80 %	4
Grain	Vienna Malt	2 kg (24.4%)	78 %	8
Grain	Caramel/Crystal Malt - 20L	1 kg (12.2%)	75 %	39
Grain	Viking Wheat Malt	1 kg (12.2%)	83 %	5
Grain	Acid Malt	0.2 kg (2.4%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	20 min	10 %
Boil	Kent Goldings	50 g	50 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Belgian Saison	Ale	Liquid	125 ml	Wyeast Labs

Extras

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

Type	Name	Amount	Use for	Time
Flavor	Skórka pomarańczy gorzka	30 g	Boil	5 min
Flavor	Skórka pomarańczy słodka	30 g	Boil	10 min