

# Mandaryn

- Gravity **13.9 BLG**
- ABV ---
- IBU **68**
- SRM **18.4**
- Style **Saison**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **6 min**
- Evaporation rate **15 %/h**
- Boil size **22.3 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 **52 C**, Time **10 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (40%)	80 %	4
Grain	Strzegom pszeniczny	1 kg (20%)	81 %	6
Grain	Strzegom Wiedeński	1.5 kg (30%)	79 %	10
Grain	Special W Weyermann	0.5 kg (10%)	80 %	280

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Aroma (end of boil)	Mandarina Bavaria	25 g	15 min	10 %
Aroma (end of boil)	Mandarina Bavaria	25 g	0 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew T-58	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Curacao	20 g	Boil	10 min
Other	Cukier	120 g	Bottling	---