

MANDARINA & MELON

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **44**
- SRM **5.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	5 kg (93.5%)	85 %	7
Grain	Carahell	0.25 kg (4.7%)	77 %	26
Grain	Caraamber	0.1 kg (1.9%)	75 %	65

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	20 g	60 min	9.8 %
Boil	Mandarina Bavaria	10 g	30 min	9.8 %
Boil	Huell Melon	15 g	30 min	6.8 %
Boil	Mandarina Bavaria	10 g	15 min	9.8 %
Boil	Huell Melon	15 g	15 min	6.8 %
Boil	Mandarina Bavaria	10 g	5 min	9.8 %
Boil	Huell Melon	20 g	5 min	6.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Siarczan magnezu	2 g	Boil	60 min