

Kulka Mandarina Bavaria

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **35**
- SRM **5.9**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (71.4%)	81 %	4
Grain	Monachijski	2 kg (28.6%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	50 g	30 min	7.6 %
Boil	Mandarina Bavaria	40 g	10 min	7.6 %
Aroma (end of boil)	Mandarina Bavaria	10 g	1 min	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11 g	Fermentis