

# M1

- Gravity **17.5 BLG**
- ABV ---
- IBU **120**
- SRM **12.6**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **62 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **75 C**, Time **20 min**

## Mash step by step

- Heat up **24.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **75C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	7 kg (82.4%)	81 %	4
Grain	Caraaroma	0.1 kg (1.2%)	78 %	400
Grain	special W	0.1 kg (1.2%)	78 %	300
Grain	Barley, Flaked	0.4 kg (4.7%)	70 %	4
Grain	Rye, Flaked	0.6 kg (7.1%)	78.3 %	4
Sugar	Corn Sugar (Dextrose)	0.3 kg (3.5%)	100 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Chinook	50 g	15 min	13 %
Boil	Cascade	50 g	15 min	6 %
Boil	Mosaic	50 g	15 min	10 %
Boil	Columbus/Tomahawk/Zeus	50 g	15 min	15.5 %
Boil	Simcoe	60 g	1 min	13 %
Boil	Chinook	25 g	1 min	13 %
Boil	Cascade	25 g	1 min	6 %

Boil	Mosaic	25 g	1 min	10 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Belgian Fruit Spicy Ale Yeast	Ale	Dry	20 g	Gozdawa