

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 % |
|------|--------|------|-------|------|

Yeasts

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