

Miasto Koni

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **28**
- SRM **4.7**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **21.5 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **71 C**, Time **25 min**
- Temp **79 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **25 min** at **71C**
- Keep mash **5 min** at **79C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------------|-----------------|-------|-----|
| Grain | Wędzony dębem Viking Malt | 4 kg (79.6%) | 80 % | 8 |
| Grain | Żytni | 1 kg (19.9%) | 85 % | 8 |
| Adjunct | Łuska ryżowa | 0.027 kg (0.5%) | 1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 25 g | 60 min | 4 % |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g | 10 min | 4 % |
| Aroma (end of boil) | Simcoe | 12 g | 10 min | 13.2 % |
| Aroma (end of boil) | Herkules | 5 g | 60 min | 20 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11.5 g | Safbrew |