

Kolońskie

- Gravity **12.1 BLG**
- ABV ---
- IBU **23**
- SRM **3.4**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **8 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **32.8 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **43 C**, Time **30 min**
- Temp **66 C**, Time **30 min**
- Temp **70 C**, Time **15 min**
- Temp **75 C**, Time **3 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **46.8C**
- Add grains
- Keep mash **30 min** at **43C**
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **70C**
- Keep mash **3 min** at **75C**
- Sparge using **23.2 liter(s)** of **76C** water or to achieve **32.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 3.7 kg (77.1%) | 81 % | 5 |
| Grain | Wheat Malt, Ger | 0.4 kg (8.3%) | 84 % | 4 |
| Grain | Wheat, Flaked | 0.3 kg (6.2%) | 77 % | 4 |
| Grain | Rice, Flaked | 0.2 kg (4.2%) | 70 % | 2 |
| Grain | Barley, Flaked | 0.2 kg (4.2%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------------------|--------|----------|------------|
| Boil | Tradition | 30 g | 60 min | 4 % |
| Boil | Styrian Golding | 6 g | 60 min | 5 % |
| Boil | Hallertau mittelfruh | 30 g | 20 min | 2.7 % |
| Aroma (end of boil) | Tradition | 30 g | 10 min | 4 % |
| Whirlpool | Hallertau mittelfruh | 30 g | --- | 2.7 % |
| Dry Hop | Hallertau mittelfruh | 30 g | 3 day(s) | 2.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------------|-------------|---------------|-------------------|
| Safbrew S-33 | Ale | Dry | 11 g | Safbrew |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|---------------|----------------|-------------|
| Fining | Irish Moss | 5 g | Boil | 15 min |