

Kalesonowa Kolońska

- Gravity **12 BLG**
- ABV ---
- IBU **22**
- SRM **2.8**
- Style **Northern German Altbier**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **29.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **29.4 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24.5 liter(s)** of strike water to **55.2C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Briess - Pilsen Malt | 4.3 kg (87.8%) | 80.5 % | 2 |
| Grain | Weyermann pszeniczny jasny | 0.5 kg (10.2%) | 80 % | 6 |
| Grain | Weyermann - Acidulated Malt | 0.1 kg (2%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Sybilla | 35 g | 60 min | 5 % |
| Boil | Sybilla | 15 g | 20 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------|------|------|--------|------------|
| safale s33 | Ale | Dry | 9 g | safale |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|------------|-----|------|--------|
| Fining | IRISH MOSS | 5 g | Boil | 10 min |
|--------|------------|-----|------|--------|