

figura retoryczna (kolsch)

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **30**
- SRM **2.9**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.2 liter(s)**
- Boil time **40 min**
- Evaporation rate **10 %/h**
- Boil size **18.9 liter(s)**

Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

Steps

- Temp **64 C**, Time **10 min**
- Temp **70 C**, Time **50 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **10 min** at **64C**
- Keep mash **50 min** at **70C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **18.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (90.9%) | 80 % | 2.5 |
| Grain | viking malt caramel pale | 0.3 kg (9.1%) | 77 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|----------|------------|
| Boil | Magnum | 21 g | 35 min | 12 % |
| Dry Hop | Galaxy | 20 g | 5 day(s) | 15 % |

Yeasts

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