

Koelsch

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **3.6**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.8 liter(s)**

Steps

- Temp **52 C**, Time **30 min**
- Temp **65 C**, Time **75 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **10.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **75 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński | 3 kg (87%) | 81 % | 4 |
| Grain | Pszeniczny | 0.19 kg (5.4%) | 85 % | 4 |
| Grain | Strzegom Wiedeński | 0.19 kg (5.4%) | 79 % | 10 |
| Grain | Weyermann - Carapils | 0.08 kg (2.2%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------------------|---------|--------|------------|
| Boil | Spalt | 15 g | 60 min | 5.5 % |
| Boil | Hallertau Mittelfruh | 11.25 g | 45 min | 3 % |
| Boil | Spalt | 15 g | 15 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 16.5 g | Danstar |