

.KOLSCH (2)

- Gravity **12.4 BLG**
- ABV ---
- IBU **28**
- SRM **3.9**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **45 C**, Time **10 min**
- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.5 kg (93.8%) | 80 % | 4 |
| Grain | Pszeniczny | 0.3 kg (6.3%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | lunga | 15 g | 60 min | 11 % |
| Boil | Tradition | 15 g | 30 min | 5.5 % |
| Boil | Tradition | 15 g | 15 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------|-------|--------|--------|------------------|
| FM50 Kłosa Kansas | Wheat | Liquid | 150 ml | Fermentum Mobile |