

# Kolsh #1 - Browar na Wyżynie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **20**
- SRM **4**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **6 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **11 %/h**
- Boil size **22.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Steps

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

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **22.5 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | pilzneński Viking Malt | 4 kg (95.2%)  | 80 %  | 5   |
| Grain | pszeniczny Viking Malt | 0.2 kg (4.8%) | 81 %  | 5   |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Perle (DE) - granulát | 10 g   | 60 min | 8 %        |
| Boil    | Perle                 | 20 g   | 15 min | 8 %        |

## Yeasts

| Name                  | Type | Form   | Amount  | Laboratory       |
|-----------------------|------|--------|---------|------------------|
| FM42 Stare Nadreńskie | Ale  | Liquid | 1000 ml | Fermentum Mobile |

## Extras

| Type        | Name             | Amount | Use for | Time   |
|-------------|------------------|--------|---------|--------|
| Water Agent | chlerek sodu     | 2 g    | Mash    | 70 min |
| Water Agent | siarczan magnezu | 2 g    | Mash    | 70 min |

|             |                       |         |      |        |
|-------------|-----------------------|---------|------|--------|
| Water Agent | kwask mlekowy 80%     | 5 g     | Mash | 70 min |
| Water Agent | woda demineralizowana | 20000 g | Mash | 70 min |
| Fining      | mech irlandzki        | 3 g     | Boil | 15 min |

## Notes

- Blend wody 70% demineralizowana 30% kranówka

Profil wody:

Ca+2 Mg+2 Na+ Cl- SO4-2 Alkalinity Residual  
59.0 3.9 31.8 51.5 50.8 26.1 -18.2

SO42-/Cl- ratio: 1.0 Balanced  
*Jan 24, 2018, 5:12 PM*