

# #173 Frau Ribbentrop 2023

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **11**
- SRM **3.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **19.8 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **22.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.66 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16.5 liter(s)**

## Steps

- Temp **45 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **49.7C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **77C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **22.9 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount          | Yield | EBC |
|-------|-----------------------|-----------------|-------|-----|
| Grain | Viking pilzneński     | 2.75 kg (61.1%) | 82 %  | 3.5 |
| Grain | Pszenica niesłodowana | 1.5 kg (33.3%)  | 75 %  | 3   |
| Grain | Płatki owsiane        | 0.25 kg (5.6%)  | 60 %  | 3   |

## Hops

| Use for             | Name                                  | Amount | Time   | Alpha acid |
|---------------------|---------------------------------------|--------|--------|------------|
| Boil                | Hallertau Mittelfruh DE 2022 granulát | 25 g   | 70 min | 3.1 %      |
| Aroma (end of boil) | Hallertau Mittelfruh DE 2022 granulát | 10 g   | 10 min | 3.1 %      |

## Yeasts

| Name                   | Type  | Form   | Amount | Laboratory       |
|------------------------|-------|--------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 40 ml  | Fermentum Mobile |

## Extras

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

|        |                           |      |      |       |
|--------|---------------------------|------|------|-------|
| Flavor | Kwiat gorzkiej pomarańczy | 50 g | Boil | 1 min |
| Flavor | Kolendra                  | 20 g | Boil | 1 min |