

# Wolf & Dragon PILS!

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **39**
- SRM **3.7**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.6 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **26.9 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **50 min**

## Mash step by step

- Heat up **22.1 liter(s)** of strike water to **71C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **50 min** at **72C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield  | EBC |
|-------|----------------------|---------------|--------|-----|
| Grain | Pilzneński           | 4 kg (83.3%)  | 81 %   | 4   |
| Grain | Rye, Flaked          | 0.4 kg (8.3%) | 78.3 % | 4   |
| Grain | Weyermann - Carapils | 0.4 kg (8.3%) | 78 %   | 4   |

## Hops

| Use for             | Name           | Amount | Time     | Alpha acid |
|---------------------|----------------|--------|----------|------------|
| Boil                | Styrian Wolf   | 10 g   | 60 min   | 13.7 %     |
| Boil                | Styrian Wolf   | 20 g   | 15 min   | 13.7 %     |
| Aroma (end of boil) | Styrian Dragon | 30 g   | 2 min    | 6.9 %      |
| Aroma (end of boil) | Styrian Wolf   | 30 g   | 2 min    | 13.7 %     |
| Dry Hop             | Styrian Wolf   | 40 g   | 5 day(s) | 13.7 %     |
| Dry Hop             | Styrian Dragon | 70 g   | 5 day(s) | 6.9 %      |

## Yeasts

| Name             | Type  | Form   | Amount | Laboratory |
|------------------|-------|--------|--------|------------|
| Saflager W 34/70 | Lager | Liquid | 300 ml | Fermentis  |

## Extras

| Type   | Name     | Amount | Use for | Time  |
|--------|----------|--------|---------|-------|
| Fining | Whirfloc | 1 g    | Boil    | 5 min |