

# ardeny

- Gravity **12.5 BLG**
- ABV ---
- IBU **16**
- SRM **5.1**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **60 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18.17 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **-11.8 liter(s)** of **76C** water

## Fermentables

| Type    | Name              | Amount  | Yield | EBC |
|---------|-------------------|---------|-------|-----|
| Grain   | Pilzneński        | 1.91 kg | 81 %  | 4   |
| Grain   | Pszeniczny        | 1.26 kg | 85 %  | 4   |
| Adjunct | płatki pszeniczne | 1.36 kg | 34 %  | 6   |
| Adjunct | płatki owsiane    | 0.5 kg  | 35 %  | 6   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 13 g   | 45 min | 10 %       |
| Boil    | Sybilla | 15 g   | 10 min | 3.5 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| safbrew s-33 | Ale  | Dry  | 11 g   | ---        |

## Extras

| Type  | Name     | Amount | Use for | Time   |
|-------|----------|--------|---------|--------|
| Spice | kolendra | 10 g   | Boil    | 10 min |
| Spice | kolendra | 5 g    | Boil    | 5 min  |
| Spice | curacao  | 6 g    | Boil    | 10 min |

|       |                   |      |      |        |
|-------|-------------------|------|------|--------|
| Other | skórka pomarańczy | 10 g | Boil | 10 min |
| Other | skórka pomarańczy | 10 g | Boil | 5 min  |
| Other | skórka cytryny    | 10 g | Boil | 10 min |
| Other | skórka cytryny    | 10 g | Boil | 5 min  |
| Herb  | rumianek          | 3 g  | Boil | 5 min  |

## Notes

- kleikowanie płatków w 9,3l wody  
*Feb 28, 2015, 10:40 PM*