

## 117 YDB

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **16.7 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **12.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **77C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

### Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Pale Malt (2 Row) Bel    | 2 kg (41.9%)   | 80 %  | 6   |
| Grain | Briess - Munich Malt 10L | 1.5 kg (31.4%) | 77 %  | 20  |
| Grain | Briess - Aromatic Malt   | 0.5 kg (10.5%) | 77 %  | 39  |
| Grain | belgian medium crystal   | 0.17 kg (3.6%) | 75 %  | 80  |
| Sugar | pilnocillo               | 0.6 kg (12.6%) | --- % | --- |

### Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Northern Brewer       | 28 g   | 90 min | 6.5 %      |
| Boil                | saaz                  | 28 g   | 15 min | 3 %        |
| Aroma (end of boil) | Saaz (Czech Republic) | 14 g   | 5 min  | 3 %        |

### Yeasts

| Name                       | Type | Form   | Amount | Laboratory |
|----------------------------|------|--------|--------|------------|
| WLP550 - Belgian Ale Yeast | Ale  | Liquid | 10 ml  | White Labs |