

## #48

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **47**
- SRM **4**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Fermentables

| Type  | Name                   | Amount       | Yield | EBC |
|-------|------------------------|--------------|-------|-----|
| Grain | Pilzneński             | 4 kg (80%)   | 81 %  | 4   |
| Grain | Strzegom Wiedeński     | 0.5 kg (10%) | 79 %  | 10  |
| Grain | Briess - Carapils Malt | 0.5 kg (10%) | 74 %  | 5   |

### Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Amarillo | 20 g   | 50 min | 9.5 %      |
| Boil    | mackinac | 25 g   | 10 min | 10.5 %     |
| Boil    | Amarillo | 30 g   | 10 min | 9.5 %      |
| Boil    | mackinac | 25 g   | 5 min  | 10.5 %     |

### Yeasts

| Name | Type  | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| W34  | Lager | Dry  | 20 g   | ---        |