

#48

- 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 | --- |