

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **25**
- SRM **4.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Słód pszeniczny Bestmalz | 2.8 kg (80%)   | 82 %  | 5   |
| Grain | Płatki owsiane           | 0.5 kg (14.3%) | 60 %  | 3   |
| Grain | Carabelge                | 0.2 kg (5.7%)  | 80 %  | 30  |

## Hops

| Use for             | Name | Amount | Time      | Alpha acid |
|---------------------|------|--------|-----------|------------|
| Boil                | Zapp | 20 g   | 50 min    | 4.2 %      |
| Aroma (end of boil) | Zapp | 30 g   | 10 min    | 4.2 %      |
| Whirlpool           | Zapp | 50 g   | 15 min    | 4.2 %      |
| Dry Hop             | Zapp | 50 g   | 10 day(s) | 4.2 %      |
| Dry Hop             | Zapp | 50 g   | 4 day(s)  | 4.2 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| safeale S33 | Ale  | Dry  | 11 g   | ---        |

## Notes

- Do wody do zacierania dodano 5 ml kwasu fosf (zbyt dużo)  
Do zacieru dodano +/- 4 szczypty gipsu piwowarskiego

Ważono 7.05.2023  
May 9, 2023, 10:13 PM