

american ale

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **33**
- SRM **3.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Pilzneński | 4 kg (95.2%) | 81 % | 4 |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (4.8%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 60 min | 16.8 % |
| Aroma (end of boil) | Columbus/Tomahawk/Zeus | 15 g | 3 min | 16.8 % |
| Dry Hop | simcoe | 50 g | 7 day(s) | 12.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11.5 g | fermentis |