

# cuba libre

---

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **33**
- SRM **22.3**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **5.7 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1 kg (28.6%)   | 80 %  | 5   |
| Grain | Płatki owsiane       | 0.5 kg (14.3%) | 85 %  | 3   |
| Grain | Pszeniczny           | 1.5 kg (42.9%) | 85 %  | 4   |
| Grain | Caraaroma            | 0.5 kg (14.3%) | 78 %  | 400 |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Aroma (end of boil) | chinool PL | 30 g   | 15 min | 13 %       |

## Yeasts

| Name                  | Type | Form  | Amount | Laboratory |
|-----------------------|------|-------|--------|------------|
| Danstar - Windsor Ale | Ale  | Slant | 150 ml | Danstar    |

## Notes

- Na cichą na 5 dni płatki dębowe po beczce rumu macerowane rumem  
Do re fermentacji użyć cukru muscovado  
Na ostanie pół godziny carafa specjal 250g  
*Jan 15, 2019, 8:25 AM*