

## 2C. International Dark Lager

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **20**
- SRM **15.9**
- Style **Dark American Lager**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **3 %**
- Size with trub loss **17.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **19.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18.8 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **19.7 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount       | Yield | EBC  |
|-------|---------------------|--------------|-------|------|
| Grain | Strzegom Pilzneński | 1.8 kg (48%) | 80 %  | 4    |
| Grain | Strzegom Wiedeński  | 1.8 kg (48%) | 79 %  | 10   |
| Grain | Carafa III          | 0.15 kg (4%) | 70 %  | 1034 |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 10 g   | 90 min | 13.5 %     |

### Yeasts

| Name          | Type | Form  | Amount | Laboratory |
|---------------|------|-------|--------|------------|
| OYL-071 Lutra | Ale  | Slant | 100 ml | ---        |

### Extras

| Type        | Name  | Amount | Use for | Time   |
|-------------|-------|--------|---------|--------|
| Water Agent | CaCO3 | 4 g    | Mash    | 60 min |