

# p1

- Gravity **12.6 BLG**
- ABV ---
- IBU **6**
- SRM **21**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pilzneński                  | 3 kg (66.7%)   | 81 %  | 4   |
| Grain | Strzegom Karmel 300         | 0.4 kg (8.9%)  | 70 %  | 299 |
| Grain | Pszeniczny                  | 0.5 kg (11.1%) | 85 %  | 4   |
| Grain | Strzegom Karmel 600         | 0.1 kg (2.2%)  | 68 %  | 601 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (11.1%) | 79 %  | 22  |

## Hops

| Use for             | Name  | Amount | Time   | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Mash                | Perle | 20 g   | 70 min | 7 %        |
| Mash                | Perle | 20 g   | 40 min | 7 %        |
| Aroma (end of boil) | perle | 10 g   | 25 min | 7 %        |

## Yeasts

| Name          | Type  | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Safbrew WB-06 | Wheat | Dry  | 11.5 g | Safbrew    |

## Extras

| Type  | Name               | Amount | Use for | Time  |
|-------|--------------------|--------|---------|-------|
| Spice | woda z igieł sosna | 3 g    | Mash    | 3 min |
| Other | sok jabłko         | 2 g    | Mash    | 3 min |

## Notes

- 40min - 47 stopni C (przerwa beta-glukanowa)  
10 min - 52 stopnie C  
30 min - 62 stopnie C  
45 min - 72 stopnie C  
Podgrzanie do 78-80 stopni - wysładzanie w 10l wody.

*Dec 28, 2015, 11:22 AM*