

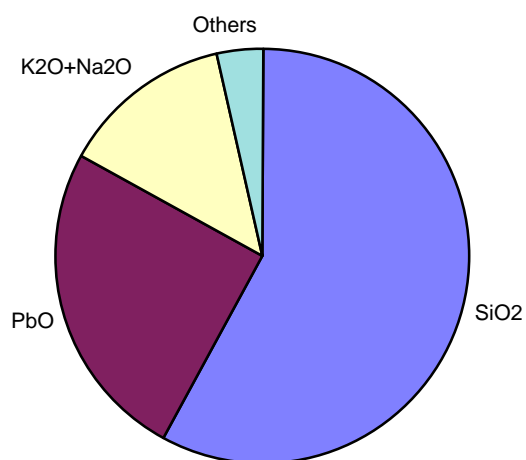
# GLASMA AB

## Specification of glass properties

**BATCH TYPE No:** 80 D  
**Definition by EU-directive :** Full lead crystal (24%)

The raw material is supplied as pelletized batch. Pellets are delivered in big bags of approximate 1000 kg corresponding to 910 kg of glass.

### Major Components :



**Calculated Physical Properties :** Viscosity as  $\log \eta$  (dPas). (Glafo)

$\log \eta = 2$  at  $1388 \pm 10$  °C

$\log \eta = 5$  at  $835 \pm 6$

Transformation Temperature  $T_g = 447 \pm 5$  °C ( $\log \eta \approx 13$ ) (Glafo)

Thermal Expansion  $\alpha_{20-300\text{ °C}} = 9,6 \cdot 10^{-6} \pm 0,2 \text{ K}^{-1}$

Density =  $2,98 \pm 0,01 \text{ kg/dm}^3$  (Appen)

Refractive Index  $n_{D20} = 1,555 \pm 0,005$  (Appen)

Recommended Melting Range, bigger pots 1380-1410 C

Recommended melting Range, smaller pots 1300-1350 C

Recommended Annealing Temperature  $455 \pm 5$  C

Glasma is officially certified to ISO 9001 and ISO 14001