

# Glass

## 1. Production context

**ID and name:** OG1 material\_glass\_production\_context

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** The production context the object is related to.

**Allowed values and other constraints:** controlled vocabulary

## 2. Recycling

**ID and name:** OG2 material\_glass\_recycling

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** Information about whether the glass was recycled.

*with the two subproperties:*

### 2.1 Indication for recycling

**ID and name:** OG2.1 material\_glass\_recycling\_indicator

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** Does the glass show indicators for recycling?

**Allowed values and other constraints:** controlled vocabulary

### 2.2 Indicators

**ID and name:** OG2.2 material\_glass\_recycling\_reason

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** If [002.1 Recycling indicator](#) is provided, short explanation for choice.

**Allowed values and other constraints:** free text

**Example:** mixture of different glass pastes

## 3. Chemical composition

**ID and name:** OG3 material\_glass\_chemistry

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1-n

**Definition:** The chemical composition of the glass.

*with the eight subproperties:*

### 3.1 Analytical method

**ID and name:** B4.1 chemistry\_method

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** The method used to determine the chemical composition.

**Allowed values and other constraints:** controlled vocabulary

### 3.2 Analysed compound

**ID and name:** B4.2 chemistry\_compound

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1–n

**Definition:** The analysed chemical compound (chemical element or oxide).

**Allowed values and other constraints:** controlled vocabulary, not available if a mass spectrometric-method is recorded in `B4.1 Analytical method`.

### 3.3 Analysed isotope

**ID and name:** B4.3 chemistry\_icp\_isotope

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–n

**Definition:** The isotope used for quantification of a chemical element.

**Allowed values and other constraints:** controlled vocabulary, only available if a mass spectrometric-method is recorded in `B4.1 Analytical method`.

### 3.4 Value

**ID and name:** B4.4 chemistry\_value

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1–n

**Definition:** The concentration of the analysed chemical compound.

**Allowed values and other constraints:** decimal number

**Example:** 15.3

### 3.5 Unit

**ID and name:** B4.5 chemistry\_unit

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1–n

**Definition:** The unit in which the concentration of the analysed chemical compound is given.

**Allowed values and other constraints:** controlled vocabulary

### 3.6 Uncertainty type

**ID and name:** B4.6 chemistry\_uncertainty\_type

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–n

**Definition:** The type of analytical uncertainty.

**Allowed values and other constraints:** controlled vocabulary

### 3.7 Confidence level

**ID and name:** B4.7 chemistry\_uncertainty\_sigma

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–n

**Definition:** Sigma value of the reported absolute analytical uncertainty.

**Allowed values and other constraints:** 1, 2, 3

**Example:** 2

### 3.8 Uncertainty value

**ID and name:** B4.8 chemistry\_uncertainty\_value

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–n

**Definition:** Value of the absolute analytical uncertainty.

**Allowed values and other constraints:** decimal number

**Example:** 0.3

## 4. Glass group

**ID and name:** OG4 material\_glass\_group

**Provided by:** TerraLID system

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** The glass material group of the sample, inferred from the chemical composition.

**Allowed values and other constraints:** controlled vocabulary

## 5. Glass colour

**ID and name:** OG5 material\_glass\_colour

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** The colour of the glass.

**Allowed values and other constraints:** controlled vocabulary

## 6. Colourant

**ID and name:** OG6 material\_glass\_colourant

**Provided by:** TerraLID system

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** The compound giving the glass its colour, inferred from the chemical composition.

**Allowed values and other constraints:** controlled vocabulary

**Example:** Cu

## 7. Decolourant

**ID and name:** OG7 material\_glass\_decolourant

**Provided by:** TerraLID system

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** The compound responsible for decolouring the glass, inferred from the chemical composition.

**Allowed values and other constraints:** controlled vocabulary

## 8. Lead source

**ID and name:** OG8 material\_glass\_lead\_source

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** The constituent that is the source of lead in the glass.

**Allowed values and other constraints:** controlled vocabulary

## 9. Sr isotopes

**ID and name:** OG9 material\_glass\_isotopes\_Sr

**Provided by:** data provider

**Obligation:** optional

**Occurrences:** 0–n

**Definition:** The  $^{87}\text{Sr}/^{86}\text{Sr}$  ratio of the glass.

*with the two subproperties:*

## 9.1 Value

**ID and name:** OG9.1 material\_glass\_isotopes\_Sr\_value

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** Value of the  $^{87}\text{Sr}/^{86}\text{Sr}$  ratio.

**Allowed values and other constraints:** decimal number

**Example:** 0.7856

## 9.2 Analytical precision

**ID and name:** OG9.2 material\_glass\_isotopes\_Sr\_2SD

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** Absolute analytical uncertainty of the  $^{87}\text{Sr}/^{86}\text{Sr}$  ratio in double standard deviation (2SD).

**Allowed values and other constraints:** decimal number

**Example:** 0.0002

# 10. Nd isotopes

**ID and name:** OG10 material\_glass\_isotopes\_Nd

**Provided by:** data provider

**Obligation:** optional

**Occurrences:** 0–n

**Definition:** The  $\epsilon\text{Nd}$  value of the glass.

*with the two subproperties:*

## 10.1 Value

**ID and name:** OG10.1 material\_glass\_isotopes\_Nd\_value

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** Value of  $\epsilon\text{Nd}$ .

**Allowed values and other constraints:** decimal number

**Example:** t.b.d.

## 10.2 Analytical precision

**ID and name:** OG10.2 material\_glass\_isotopes\_Nd\_2SD

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** Absolute analytical uncertainty of the  $\epsilon$ Nd value in double standard deviation (2SD).

**Allowed values and other constraints:** decimal number

**Example:** t.b.d.

## 11. Hf isotopes

**ID and name:** OG11 material\_glass\_isotopes\_Hf

**Provided by:** data provider

**Obligation:** optional

**Occurrences:** 0–n

**Definition:** The  $\epsilon$ Hf value of the glass.

*with the two subproperties:*

### 11.1 Value

**ID and name:** OG11.1 material\_glass\_isotopes\_Hf\_value

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** Value of  $\epsilon$ Hf.

**Allowed values and other constraints:** decimal number

**Example:** t.b.d.

### 11.2 Analytical precision

**ID and name:** OG11.2 material\_glass\_isotopes\_Hf\_2SD

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** Absolute analytical uncertainty of the  $\epsilon$ Hf value in double standard deviation (2SD).

**Allowed values and other constraints:** decimal number

**Example:** t.b.d.

## 12. O isotopes

**ID and name:** OG12 material\_glass\_isotopes\_O

**Provided by:** data provider

**Obligation:** optional

**Occurrences:** 0–n

**Definition:** The  $\delta^{18}\text{O}$  value of the glass.

*with the two subproperties:*

## 12.1 Value

**ID and name:** OG12.1 material\_glass\_isotopes\_O\_value

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** Value of  $\delta^{18}\text{O}$ .

**Allowed values and other constraints:** decimal number

**Example:** t.b.d.

## 12.2 Analytical precision

**ID and name:** OG12.2 material\_glass\_isotopes\_O\_SD

**Provided by:** data provider

**Obligation:** recommended

**Occurrences:** 0–1

**Definition:** Absolute analytical uncertainty of the  $\delta^{18}\text{O}$  value given in single SD.

**Allowed values and other constraints:** decimal number

**Example:** t.b.d.

# 13. Glass corrosion

**ID and name:** OG13 material\_glass\_corrosion

**Provided by:** data provider

**Obligation:** optional

**Occurrences:** 0–n

**Definition:** Information about the corrosion of the glass and its extent.

*with the two subproperties:*

## 13.1 Extent

**ID and name:** OG13.1 material\_glass\_corrosion\_extent

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** The extent of corrosion affecting the glass.

**Allowed values and other constraints:** controlled vocabulary

## 13.2 Details

**ID and name:** OG13.2 material\_glass\_corrosion\_reason

**Provided by:** data provider

**Obligation:** mandatory

**Occurrences:** 1

**Definition:** If [0013.1 Recycling indicator](#) is provided, short description of features.

**Allowed values and other constraints:** free text

**Example:** iridescent corrosion crust