



# AumComercial

## Diccionario de Datos

Servidor: PostgreSQL 16.0  
Autor: Administrator  
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Versión: 2.0

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## 1. Introducción

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Un diccionario de datos es una colección de metadatos como el nombre del objeto, el tipo de datos, el tamaño, la clasificación y las relaciones con otros activos de datos. Lo utilizan administradores de datos, analistas e ingenieros para comprender y crear en los activos de datos. Ayuda en la creación de datos auténticos, transparentes, consistentes y sólidos para toda la organización.

En este diccionario de datos, se eligen los siguientes modelos para la documentación.:

PostgreSQL 16.0 (PostgreSQL)

PostgreSQL\_Tenant (PostgreSQL)

Para cada modelo, las definiciones de tablas (entidades/colecciones), vistas y funciones se enumeran en orden. Las propiedades detalladas de los elementos de datos (tipo de datos, tamaño, nulalidad, opcionalidad, índices, claves externas, restricciones) están organizadas en formato tabular.

## 2. Modelo: AumComercial (PostgreSQL)

Versión: 16.0

1 base de datos se enumera a continuación.

### 2.1. Base de datos: AumComercial

1 esquema se enumera a continuación.

#### 2.1.1. Esquema: public


Objetos de base de datos que se enumerarán: 33 Tablas

##### 2.1.1.1. Tablas

###### 2.1.1.1.1. Tabla: COM\_Condition

Tabla maestra de condiciones del proveedor


###### Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | condition  | varchar(255)   | ✓        |       |
| 4    | value  | decimal(10, 2) | ✓        |       |
| 5    | state  | bool           | ✓        |       |
| 6    | creationDate   | date           | ✓        |       |
| 7    | modifyDate   | date           | ✓        |       |
| 8    | modifyHour   | time           | ✓        |       |

###### 2.1.1.1.2. Tabla: COM\_Entity\_Condition

Tabla detalle de las condiciones de cada entidad proveedor

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idEntity   | uuid           | ✓        |       |
| 4    | idCondition  | uuid           | ✓        |       |
| 5    | value  | decimal(10, 2) | ✓        |       |
| 6    | creationDate   | date           | ✓        |       |
| 7    | modifyDate   | date           | ✓        |       |
| 8    | modifyHour   | time           | ✓        |       |


## Clave Foraneas

| Nombre                        | Campos      | Tabla Referida       | Campos Referidos | En Eliminar | En                      |
|-------------------------------|-------------|----------------------|------------------|-------------|-------------------------|
| FK_Condition_Entity_Condition | idCondition | public.COM_Condition | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Entity_Entity_Condition    | idEntity    | public.Entity        | id               | CASCADE     | NO ACTION               |

### 2.1.1.1.3. Tabla: COM\_Entity\_LabResult

Tabla detalle de los resultados de laboratorio de cada entidad Laboratorio

## Campos

| Pos. | Nombre   | Tipo | Not Null | Otros |
|------|--|------|----------|-------|
| 1    | id  | uuid | ✓        |       |
| 2    | idUser   | uuid | ✓        |       |
| 3    | idSample   | uuid | ✓        |       |
| 4    | idEntity   | uuid | ✓        |       |
| 5    | entryDateSample  | date | ✓        |       |
| 6    | reportDate   | date | ✓        |       |
| 7    | creationDate   | date | ✓        |       |
| 8    | modifyDate   | date | ✓        |       |
| 9    | modifyHour   | time | ✓        |       |


## Clave Foraneas

| Nombre                         | Campos   | Tabla Referida        | Campos Referidos | En Eliminar | En                      |
|--------------------------------|----------|-----------------------|------------------|-------------|-------------------------|
| FK_Lot_Sample_Entity_LabResult | idSample | public.COM_Lot_Sample | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Entity_Entity_LabResult     | idEntity | public.Entity         | id               | CASCADE     | NO ACTION               |

### 2.1.1.1.4. Tabla: COM\_Entity\_LabResult\_Item

Tabla detalle de la desglosa de cada resultado de laboratorio

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idLabResult  | uuid           | ✓        |       |
| 4    | param  | varchar(255)   | ✓        |       |
| 5    | value  | decimal(10, 2) | ✓        |       |
| 6    | creationDate   | date           | ✓        |       |
| 7    | modifyDate   | date           | ✓        |       |
| 8    | modifyHour   | time           | ✓        |       |


## Clave Foraneas

| Nombre                                    | Campos      | Tabla Referida              | Campos Referidos | En Eliminar | En                      |
|---|-------------|-----------------------------|------------------|-------------|-------------------------|
| FK_Entity_LabResult_Entity_LabResult_Item | idLabResult | public.COM_Entity_LabResult | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.5. Tabla: COM\_Entity\_Maquila\_Range

Tabla detalle de la maquila de cada entidad proveedor

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idEntity   | uuid           | ✓        |       |
| 4    | idMaquila_Range  | uuid           | ✓        |       |
| 5    | maquila  | decimal(10, 2) | ✓        |       |
| 6    | creationDate   | date           | ✓        |       |
| 7    | modifyDate   | date           | ✓        |       |
| 8    | modifyHour   | time           | ✓        |       |


## Clave Foraneas

| Nombre                                | Campos          | Tabla Referida           | Campos Referidos | En Eliminar | En                      |
|---------------------------------------|-----------------|--------------------------|------------------|-------------|-------------------------|
| FK_Maquila_Range_Entity_Maquila_Range | idMaquila_Range | public.COM_Maquila_Range | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Entity_Entity_Maquila_Range        | idEntity        | public.Entity            | id               | CASCADE     | NO ACTION               |

### 2.1.1.1.6. Tabla: COM\_Lot\_Crushed

Tabla detalle de los chancados de cada lote

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idLot  | uuid           | ✓        |       |
| 4    | crushDate  | date           | ✓        |       |
| 5    | subTotal   | decimal(10, 2) | ✓        |       |
| 6    | igv  | decimal(10, 2) | ✓        |       |
| 7    | total  | decimal(10, 2) | ✓        |       |
| 8    | detractation   | decimal(255)   | ✓        |       |



|    |              |              |   |  |
|----|--------------|--------------|---|--|
| 9  | totalCrush   | decimal(255) | ✓ |  |
| 10 | creationDate | date         | ✓ |  |
| 11 | modifyDate   | date         | ✓ |  |
| 12 | modifyHour   | time         | ✓ |  |


### Clave Foraneas

| Nombre             | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|--------------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Lot_Lot_Crushed | idLot  | public.Lot     | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.7. Tabla: COM\_Lot\_Crushed\_Item

Tabla detalle de los items de cada chancado de lote

### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idCrushed  | uuid         | ✓        |       |
| 4    | material   | varchar(255) | ✓        |       |
| 5    | weight   | decimal      | ✓        |       |
| 6    | unitValue  | decimal(255) | ✓        |       |
| 7    | subTotal   | decimal(255) | ✓        |       |
| 8    | creationDate   | date         | ✓        |       |
| 9    | modifyDate   | date         | ✓        |       |
| 10   | modifyHour   | time         | ✓        |       |


### Clave Foraneas

| Nombre                          | Campos    | Tabla Referida         | Campos Referidos | En Eliminar | En                      |
|---------------------------------|-----------|------------------------|------------------|-------------|-------------------------|
| FK_Lot_Crushed_Lot_Crushed_Item | idCrushed | public.COM_Lot_Crushed | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.8. Tabla: COM\_Lot\_Sample

Tabla detalle de las muestras tomadas de cada lote

#### Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idType   | uuid           | ✓        |       |
| 4    | idLot  | uuid           | ✓        |       |
| 5    | externalCode   | varchar(255)   | ✓        |       |
| 6    | wetWeight  | decimal(10, 2) | ✓        |       |
| 7    | dryWeight  | decimal(10, 2) | ✓        |       |
| 8    | humidity   | decimal(10, 2) | ✓        |       |
| 9    | creationDate   | date           | ✓        |       |
| 10   | modifyDate   | date           | ✓        |       |
| 11   | modifyHour   | time           | ✓        |       |


#### Clave Foraneas

| Nombre             | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|--------------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Lot_Lot_Sample  | idLot  | public.Lot     | id               | CASCADE     | actualizar<br>NO ACTION |
| FK_Type_Lot_Sample | idType | public.Type    | id               | RESTRICT    | NO ACTION               |

### 2.1.1.1.9. Tabla: COM\_Lot\_Weight

Tabla detalle de los pesos tomados de cada lote

#### Campos

| Pos. | Nombre   | Tipo | Not Null | Otros |
|------|--|------|----------|-------|
| 1    | id  | uuid | ✓        |       |
| 2    | idUser   | uuid | ✓        |       |
| 3    | idLot  | uuid | ✓        |       |
| 4    | idType   | uuid | ✓        |       |

|    |             |                |   |  |
|----|-------------|----------------|---|--|
| 5  | dryWeight   | decimal(10, 2) | ✓ |  |
| 6  | tareWeight  | decimal(10, 2) | ✓ |  |
| 7  | weight      | decimal(10, 2) | ✓ |  |
| 8  | crationDate | date           | ✓ |  |
| 9  | modifyDate  | date           | ✓ |  |
| 10 | modifyHour  | time           | ✓ |  |


## Clave Foraneas

| Nombre             | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|--------------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Type_Lot_Weight | idType | public.Type    | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Lot_Lot_Weight  | idLot  | public.Lot     | id               | CASCADE     | NO ACTION               |

### 2.1.1.1.10. Tabla: COM\_Maquila

Tabla maestra de maquilas

## Campos


| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | description  | varchar(255) | ✓        |       |
| 4    | state  | bool         | ✓        |       |
| 5    | crationDate  | date         | ✓        |       |
| 6    | modifyDate   | date         | ✓        |       |
| 7    | modifyHour   | time         | ✓        |       |

### 2.1.1.1.11. Tabla: COM\_Maquila\_Range

Tabla detalle de los ragos utilizados por las maquilas



## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idMaquila  | uuid           | ✓        |       |
| 4    | valueMin   | decimal(10, 2) | ✓        |       |
| 5    | valueMax   | decimal(10, 2) | ✓        |       |
| 6    | value  | decimal(10, 2) | ✓        |       |
| 7    | creationDate   | date           | ✓        |       |
| 8    | modifyDate   | date           | ✓        |       |
| 9    | modifyHour   | time           | ✓        |       |


## Clave Foraneas

| Nombre                   | Campos    | Tabla Referida     | Campos Referidos | En Eliminar | En                      |
|--------------------------|-----------|--------------------|------------------|-------------|-------------------------|
| FK_Maquila_Maquila_Range | idMaquila | public.COM_Maquila | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.12. Tabla: COM\_Purchase

Tabla maestra de compras de lotes

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idLot  | uuid           | ✓        |       |
| 4    | purchaseDate   | date           | ✓        |       |
| 5    | purchaseOrder  | varchar(255)   |          |       |
| 6    | closeDatePrice   | date           | ✓        |       |
| 7    | wetWeight  | decimal(10, 2) | ✓        |       |
| 8    | humidity   | decimal(10, 2) | ✓        |       |
| 9    | dryWeight  | decimal(10, 2) | ✓        |       |

|    |               |                |   |  |
|----|---------------|----------------|---|--|
| 10 | factor        | decimal(10, 2) | ✓ |  |
| 11 | subTotal      | decimal(10, 2) | ✓ |  |
| 12 | igv           | decimal(10, 2) | ✓ |  |
| 13 | total         | decimal(10, 2) | ✓ |  |
| 14 | detraccion    | decimal(10, 2) | ✓ |  |
| 15 | totalPurchase | decimal(10, 2) | ✓ |  |
| 16 | state         | varchar(255)   | ✓ |  |
| 17 | creationDate  | date           | ✓ |  |
| 18 | modifyDate    | date           | ✓ |  |
| 19 | modifyHour    | time           | ✓ |  |
| 20 | deleted       | bool           | ✓ |  |


### Clave Foraneas

| Nombre          | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|-----------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Lot_Purchase | idLot  | public.Lot     | id               | RESTRICT    | actualizar<br>NO ACTION |

### 2.1.1.1.13. Tabla: COM\_Purchase\_Item

Tabla detalle de los items de cada compra

### Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idPurchase   | uuid           | ✓        |       |
| 4    | idMineral  | uuid           | ✓        |       |
| 5    | valuePurchase  | decimal(10, 2) | ✓        |       |
| 6    | price  | decimal(10, 2) | ✓        |       |
| 7    | dryWeight  | decimal(10, 2) | ✓        |       |
| 8    | law  | decimal(10, 2) | ✓        |       |
| 9    | recuperation   | decimal(10, 2) | ✓        |       |

|    |                    |                |   |  |
|----|--------------------|----------------|---|--|
| 10 | internationalPrice | decimal(10, 2) | ✓ |  |
| 11 | comercialRisk      | decimal(10, 2) | ✓ |  |
| 12 | maquilaCost        | decimal(10, 2) |   |  |
| 13 | factor             | decimal(10, 2) |   |  |
| 14 | cyanideConsumption | decimal(10, 2) |   |  |
| 15 | flete              | decimal(10, 2) |   |  |
| 16 | creationDate       | date           | ✓ |  |
| 17 | modifyDate         | date           | ✓ |  |
| 18 | modifyHour         | time           | ✓ |  |


## Clave Foraneas

| Nombre                    | Campos     | Tabla Referida      | Campos Referidos | En Eliminar | En actualizar<br>NO ACTION |
|---------------------------|------------|---------------------|------------------|-------------|----------------------------|
| FK_Purchase_Purchase_Item | idPurchase | public.COM_Purchase | id               | CASCADE     |                            |
| FK_Mineral_Purchase_Item  | idMineral  | public.Mineral      | id               | RESTRICT    | NO ACTION                  |

### 2.1.1.1.14. Tabla: COM\_Sale

Tabla maestra de ventas de lotes

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idPlant  | uuid           | ✓        |       |
| 4    | saleDate   | date           | ✓        |       |
| 5    | subtotal   | decimal(10, 2) | ✓        |       |
| 6    | igv  | decimal(10, 2) | ✓        |       |
| 7    | total  | decimal(10, 2) | ✓        |       |
| 8    | detracton  | decimal(10, 2) | ✓        |       |
| 9    | totalSale  | decimal(10, 2) | ✓        |       |

|    |              |      |   |  |
|----|--------------|------|---|--|
| 10 | creationDate | date | ✓ |  |
| 11 | modifyDate   | date | ✓ |  |
| 12 | modifyHour   | time | ✓ |  |


### Clave Foraneas

| Nombre               | Campos  | Tabla Referida      | Campos Referidos | En Eliminar | En                      |
|----------------------|---------|---------------------|------------------|-------------|-------------------------|
| FK_Entity_Plant_Sale | idPlant | public.Entity_Plant | id               | RESTRICT    | actualizar<br>NO ACTION |

### 2.1.1.1.15. Tabla: COM\_Sale\_Item

Tabla detalle de los items de cada venta

### Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idSale   | uuid           | ✓        |       |
| 4    | idLot  | uuid           | ✓        |       |
| 5    | wetWeight  | decimal(10, 2) | ✓        |       |
| 6    | humidity   | decimal(10, 2) | ✓        |       |
| 7    | dryWeight  | decimal(10, 2) | ✓        |       |
| 8    | factor   | decimal(10, 2) | ✓        |       |
| 9    | total  | decimal(10, 2) | ✓        |       |
| 10   | creationDate   | date           | ✓        |       |
| 11   | modifyDate   | date           | ✓        |       |
| 12   | modifyHour   | time           | ✓        |       |

### Clave Foraneas


| Nombre            | Campos | Tabla Referida  | Campos Referidos | En Eliminar | En                      |
|-------------------|--------|-----------------|------------------|-------------|-------------------------|
| FK_Lot_Sale_Item  | idLot  | public.Lot      | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Sale_Sale_Item | idSale | public.COM_Sale | id               | CASCADE     | NO ACTION               |



### 2.1.1.1.16. Tabla: COM\_Sale\_Item\_Detail

Tabla detalle de los desgloses de cada item de venta

#### Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idItemSale   | uuid           | ✓        |       |
| 4    | idMineral  | uuid           | ✓        |       |
| 5    | valueSale  | decimal(10, 2) | ✓        |       |
| 6    | price  | decimal(10, 2) | ✓        |       |
| 7    | dryWeight  | decimal(10, 2) | ✓        |       |
| 8    | law  | decimal(10, 2) | ✓        |       |
| 9    | recuperation   | decimal(10, 2) | ✓        |       |
| 10   | internationalPrice   | decimal(10, 2) | ✓        |       |
| 11   | commerceRisk   | decimal(10, 2) | ✓        |       |
| 12   | maquilaCost  | decimal(10, 2) |          |       |
| 13   | factor   | decimal(10, 2) |          |       |
| 14   | cyanideConsumption   | decimal(10, 2) |          |       |
| 15   | flete  | decimal(10, 2) |          |       |
| 16   | creationDate   | date           | ✓        |       |
| 17   | modifyDate   | date           | ✓        |       |
| 18   | modifyHour   | date           | ✓        |       |


#### Clave Foraneas

| Nombre                        | Campos     | Tabla Referida       | Campos Referidos | En Eliminar | En actualizar<br>NO ACTION |
|-------------------------------|------------|----------------------|------------------|-------------|----------------------------|
| FK_Sale_Item_Sale_Item_Detail | idItemSale | public.COM_Sale_Item | id               | CASCADE     |                            |
| FK_Mineral_Sale_Item_Detail   | idMineral  | public.Mineral       | id               | RESTRICT    | NO ACTION                  |

### 2.1.1.1.17. Tabla: COM\_Transaction

Tabla maestra de transacciones

#### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idType   | uuid         | ✓        |       |
| 4    | transaction  | varchar(255) | ✓        |       |
| 5    | creationDate   | date         | ✓        |       |
| 6    | modifyDate   | date         | ✓        |       |
| 7    | modifyHour   | time         | ✓        |       |


#### Clave Foraneas

| Nombre              | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|---------------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Type_Transaction | idType | public.Type    | id               | RESTRICT    | actualizar<br>NO ACTION |

### 2.1.1.1.18. Tabla: COM\_Transaction\_Detail

Tabla detalle de movimientos de negociacion de cada transaccion

#### Campos

| Pos. | Nombre   | Tipo | Not Null | Otros |
|------|--|------|----------|-------|
| 1    | id  | uuid | ✓        |       |
| 2    | idUser   | uuid | ✓        |       |
| 3    | idTransaction  | uuid | ✓        |       |
| 4    | idLot  | uuid | ✓        |       |
| 5    | idSample   | uuid | ✓        |       |
| 6    | idLabResult  | uuid | ✓        |       |
| 7    | isActive   | bool | ✓        |       |
| 8    | creationDate   | date | ✓        |       |
| 9    | modifyDate   | date | ✓        |       |
| 10   | modifyHour   | date | ✓        |       |


## Clave Foraneas

| Nombre                                 | Campos        | Tabla Referida              | Campos Referidos | En Eliminar | En                      |
|--|---------------|-----------------------------|------------------|-------------|-------------------------|
| FK_Transaction_Transaction_Detail      | idTransaction | public.COM_Transaction      | id               | CASCADE     | actualizar<br>NO ACTION |
| FK_Lot_Transaction_Detail              | idLot         | public.Lot                  | id               | RESTRICT    | NO ACTION               |
| FK_Lot_Sample_Transaction_Detail       | idSample      | public.COM_Lot_Sample       | id               | RESTRICT    | NO ACTION               |
| FK_Entity_LabResult_Transaction_Detail | idLabResult   | public.COM_Entity_LabResult | id               | RESTRICT    | NO ACTION               |

### 2.1.1.1.19. Tabla: Config

Tabla maestra de configuraciones globales

## Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idType   | uuid         | ✓        |       |
| 4    | configName   | varchar(255) | ✓        |       |
| 5    | configValue  | varchar(255) |          |       |
| 6    | configJsonValue  | json         |          |       |
| 7    | configHtmlValue  | text         |          |       |
| 8    | active   | bool         | ✓        |       |
| 9    | creationDate   | date         | ✓        |       |
| 10   | modifyDate   | date         | ✓        |       |
| 11   | modifyHour   | time         | ✓        |       |


## Clave Foraneas

| Nombre         | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|----------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Type_Config | idType | public.Type    | id               | RESTRICT    | actualizar<br>NO ACTION |

### 2.1.1.1.20. Tabla: Entity

Tabla maestra de entidades que participan en los distintos flujos

#### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idType   | uuid         | ✓        |       |
| 4    | idUbigeo   | uuid         | ✓        |       |
| 5    | externalCode   | varchar(255) |          |       |
| 6    | document   | varchar(255) | ✓        |       |
| 7    | docNumber  | varchar(255) | ✓        |       |
| 8    | name   | varchar(255) | ✓        |       |
| 9    | phoneNumber  | varchar(255) |          |       |
| 10   | email  | varchar(255) |          |       |
| 11   | concession   | varchar(255) |          |       |
| 12   | state  | bool(255)    | ✓        |       |
| 13   | creationDate   | date         | ✓        |       |
| 14   | modifyDate   | date         | ✓        |       |
| 15   | modifyHour   | time         | ✓        |       |
| 16   | deleted  | bool         | ✓        |       |


#### Clave Foraneas

| Nombre           | Campos   | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|------------------|----------|----------------|------------------|-------------|-------------------------|
| FK_Type_Entity   | idType   | public.Type    | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Ubigeo_Entity | idUbigeo | public.Ubigeo  | id               | RESTRICT    | NO ACTION               |

### 2.1.1.1.21. Tabla: Entity\_Address

Tabla detalle de las direcciones de cada entidad

## Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idType   | uuid         | ✓        |       |
| 4    | idEntity   | uuid         | ✓        |       |
| 5    | address  | varchar(255) | ✓        |       |
| 6    | dsitric  | varchar(255) |          |       |
| 7    | province   | varchar(255) |          |       |
| 8    | departament  | varchar(255) |          |       |
| 9    | isPrincipal  | bool         | ✓        |       |
| 10   | state  | bool         | ✓        |       |
| 11   | creationDate   | date         | ✓        |       |
| 12   | modifyDate   | date         | ✓        |       |
| 13   | modifyHour   | time         | ✓        |       |


## Clave Foraneas

| Nombre                   | Campos   | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|--------------------------|----------|----------------|------------------|-------------|-------------------------|
| FK_Type_Entity_Address   | idType   | public.Type    | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Entity_Entity_Address | idEntity | public.Entity  | id               | CASCADE     | NO ACTION               |

### 2.1.1.1.22. Tabla: Entity\_Plant

Tabla detalle de plantas de cada entidad cliente

## Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idEntity   | uuid         | ✓        |       |
| 4    | externalCode   | varchar(255) | ✓        |       |

|    |              |              |   |  |
|----|--------------|--------------|---|--|
| 5  | name         | varchar(255) | ✓ |  |
| 6  | email        | varchar(255) |   |  |
| 7  | numberPhone  | varchar(9)   |   |  |
| 8  | address      | varchar(255) |   |  |
| 9  | creationDate | date         | ✓ |  |
| 10 | modifyDate   | date         | ✓ |  |
| 11 | modifyHour   | time         | ✓ |  |


### Clave Foraneas

| Nombre                 | Campos   | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|------------------------|----------|----------------|------------------|-------------|-------------------------|
| FK_Entity_Entity_Plant | idEntity | public.Entity  | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.23. Tabla: Entity\_State\_List

Tabla detalle de diferentes listas de estados de una entidad

### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idEntity   | uuid         | ✓        |       |
| 4    | state  | varchar(255) | ✓        |       |
| 5    | creationDate   | date         | ✓        |       |
| 6    | modifyDate   | date         | ✓        |       |
| 7    | modifyHour   | time         | ✓        |       |


### Clave Foraneas

| Nombre                      | Campos   | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|-----------------------------|----------|----------------|------------------|-------------|-------------------------|
| FK_Entity_Entity_State_List | idEntity | public.Entity  | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.24. Tabla: Entity\_ToEntity

Tabla detalle de la relacion entre 2 o mas entidades

#### Campos

| Pos. | Nombre   | Tipo | Not Null | Otros |
|------|--|------|----------|-------|
| 1    | id  | uuid | ✓        |       |
| 2    | idUser   | uuid | ✓        |       |
| 3    | idEntityPrimary  | uuid | ✓        |       |
| 4    | idEntitySecondary  | uuid | ✓        |       |
| 5    | idType   | uuid | ✓        |       |
| 6    | creationDate   | date | ✓        |       |
| 7    | modifyDate   | date | ✓        |       |
| 8    | modifyHour   | time | ✓        |       |


#### Clave Foraneas

| Nombre                              | Campos            | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|-------------------------------------|-------------------|----------------|------------------|-------------|-------------------------|
| FK_Type_Entity_ToEntity             | idType            | public.Type    | id               | RESTRICT    | actualizar<br>NO ACTION |
| FK_Entity_Primary_Entity_ToEntity   | idEntityPrimary   | public.Entity  | id               | CASCADE     | NO ACTION               |
| FK_Entity_Secondary_Entity_ToEntity | idEntitySecondary | public.Entity  | id               | RESTRICT    | NO ACTION               |

### 2.1.1.1.25. Tabla: Invoice

Tabla maestra de facturas

#### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idType   | uuid         | ✓        |       |
| 4    | idEntity   | uuid         | ✓        |       |
| 5    | invoiceNumber  | varchar(255) | ✓        |       |

|    |                      |                |   |  |
|----|----------------------|----------------|---|--|
| 6  | invoiceDate          | date           | ✓ |  |
| 7  | entityDocNumber      | varchar(255)   | ✓ |  |
| 8  | address              | varchar(255)   |   |  |
| 9  | currency             | varchar(255)   | ✓ |  |
| 10 | paymentMethod        | varchar(255)   | ✓ |  |
| 11 | shippingGuideSender  | varchar(255)   |   |  |
| 12 | shippingGuideCarrier | varchar(255)   |   |  |
| 13 | subTotal             | decimal(10, 2) | ✓ |  |
| 14 | igv                  | decimal(10, 2) | ✓ |  |
| 15 | total                | decimal(10, 2) | ✓ |  |
| 16 | state                | varchar(255)   | ✓ |  |
| 17 | creationDate         | date           | ✓ |  |
| 18 | modifyDate           | date           | ✓ |  |
| 19 | modifyHour           | time           | ✓ |  |
| 20 | deleted              | bool           | ✓ |  |


## Clave Foraneas

| Nombre            | Campos   | Tabla Referida | Campos Referidos | En Eliminar | En actualizar<br>NO ACTION |
|-------------------|----------|----------------|------------------|-------------|----------------------------|
| FK_Type_Invoice   | idType   | public.Type    | id               | RESTRICT    |                            |
| FK_Entity_Invoice | idEntity | public.Entity  | id               | RESTRICT    | NO ACTION                  |

### 2.1.1.1.26. Tabla: Invoice\_Item

Tabla detalle de los items de cada factura

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idInvoice  | uuid           | ✓        |       |
| 4    | amount   | decimal(10, 2) | ✓        |       |



|    |                 |                |   |  |
|----|-----------------|----------------|---|--|
| 5  | unitMeasurement | varchar(255)   | ✓ |  |
| 6  | description     | varchar(255)   | ✓ |  |
| 7  | unitValue       | decimal(10, 2) | ✓ |  |
| 8  | subTotal        | decimal(10, 2) | ✓ |  |
| 9  | creationDate    | date           | ✓ |  |
| 10 | modifyDate      | date           | ✓ |  |
| 11 | modifyHour      | time           | ✓ |  |


### Clave Foraneas

| Nombre                  | Campos    | Tabla Referida | Campos Referidos | En Eliminar | En actualizar<br>NO ACTION |
|-------------------------|-----------|----------------|------------------|-------------|----------------------------|
| FK_Invoice_Invoice_Item | idInvoice | public.Invoice | id               | CASCADE     |                            |

### 2.1.1.1.27. Tabla: Lot

Tabla Maestra de Lotes de mineral

### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idType   | uuid         | ✓        |       |
| 4    | idEntitySupplier   | uuid         | ✓        |       |
| 5    | idEntityCollector  | uuid         | ✓        |       |
| 6    | externalCode   | varchar(255) | ✓        |       |
| 7    | entryDate  | date         |          |       |
| 8    | departureDate  | date         |          |       |
| 9    | entryPlantDate   | date         |          |       |
| 10   | mineralType  | varchar(255) |          |       |
| 11   | cargoType  | varchar(255) |          |       |
| 12   | origin   | varchar(255) | ✓        |       |
| 13   | shippingGuideSender  | varchar(255) |          |       |

|    |                      |                |   |  |
|----|----------------------|----------------|---|--|
| 14 | shippingGuideCarrier | varchar(255)   |   |  |
| 15 | wetWeight            | decimal(10, 2) |   |  |
| 16 | dryWeight            | decimal(10, 2) |   |  |
| 17 | state                | varchar(255)   | ✓ |  |
| 18 | creationDate         | date           | ✓ |  |
| 19 | modifyDate           | date           | ✓ |  |
| 20 | deleted              | bool           | ✓ |  |


### Clave Foraneas

| Nombre                  | Campos            | Tabla Referida | Campos Referidos | En Eliminar | En actualizar |
|-------------------------|-------------------|----------------|------------------|-------------|---------------|
| FK_Type_Lot             | idType            | public.Type    | id               | RESTRICT    | NO ACTION     |
| FK_Entity_Supplier_Lot  | idEntitySupplier  | public.Entity  | id               | RESTRICT    | NO ACTION     |
| FK_Entity_Collector_Lot | idEntityCollector | public.Entity  | id               | RESTRICT    | NO ACTION     |

### 2.1.1.1.28. Tabla: Lot\_MapFiles

Tabla detalle de las rutas de archivos creados por cada lote

#### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idLot  | uuid         | ✓        |       |
| 4    | fileName   | varchar(255) | ✓        |       |
| 5    | fileUrl  | varchar(255) | ✓        |       |
| 6    | fileType   | varchar(255) | ✓        |       |
| 7    | creationDate   | date         | ✓        |       |
| 8    | modifyDate   | date         | ✓        |       |
| 9    | modifyHour   | time         | ✓        |       |


## Clave Foraneas

| Nombre              | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|---------------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Lot_Lot_MapFiles | idLot  | public.Lot     | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.29. Tabla: Lot\_Transaction

Tabla detalle de la transicion de estados de cada lote

## Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | idLot  | uuid         | ✓        |       |
| 4    | state  | varchar(255) | ✓        |       |
| 5    | creationDate   | date         | ✓        |       |
| 6    | modifyDate   | date         | ✓        |       |
| 7    | modifyHour   | date         | ✓        |       |


## Clave Foraneas

| Nombre             | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|--------------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Lot_Transaction | idLot  | public.Lot     | id               | CASCADE     | actualizar<br>NO ACTION |

### 2.1.1.1.30. Tabla: Mineral

Tabla maestra de minerales

## Campos

| Pos. | Nombre   | Tipo           | Not Null | Otros |
|------|--|----------------|----------|-------|
| 1    | id  | uuid           | ✓        |       |
| 2    | idUser   | uuid           | ✓        |       |
| 3    | idType   | uuid           | ✓        |       |
| 4    | internationalPrice   | decimal(10, 2) | ✓        |       |

|   |                  |                |   |  |
|---|------------------|----------------|---|--|
| 5 | recuperationCost | decimal(10, 2) | ✓ |  |
| 6 | factor           | decimal(10, 2) |   |  |
| 7 | creationDate     | date           | ✓ |  |
| 8 | modifyDate       | date           | ✓ |  |
| 9 | modifyHour       | time(255)      | ✓ |  |


### Clave Foraneas

| Nombre          | Campos | Tabla Referida | Campos Referidos | En Eliminar | En                      |
|-----------------|--------|----------------|------------------|-------------|-------------------------|
| FK_Type_Mineral | idType | public.Type    | id               | RESTRICT    | actualizar<br>NO ACTION |

### 2.1.1.1.31. Tabla: Type

Tabla maestra de tipos de cada modelo


#### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | code   | varchar(255) | ✓        |       |
| 4    | type   | varchar(255) | ✓        |       |
| 5    | creationDate   | date         | ✓        |       |
| 6    | modifyDate   | date         | ✓        |       |
| 7    | modifyHour   | time         | ✓        |       |

### 2.1.1.1.32. Tabla: Ubigeo

Tabla maestra de ubigeos


## Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | idUser   | uuid         | ✓        |       |
| 3    | ubigeo   | varchar(255) | ✓        |       |
| 4    | district   | varchar(255) | ✓        |       |
| 5    | province   | varchar(255) | ✓        |       |
| 6    | departament  | varchar(255) | ✓        |       |
| 7    | creationDate   | date         | ✓        |       |
| 8    | modifyDate   | date         | ✓        |       |
| 9    | modifyHour   | varchar(255) | ✓        |       |

### 2.1.1.1.33. Tabla: User

Tabla maestra de usuarios

## Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | name   | varchar(255) | ✓        |       |
| 3    | email  | varchar(255) | ✓        |       |
| 4    | phoneNumber  | varchar(255) | ✓        |       |
| 5    | userName   | varchar(255) | ✓        |       |
| 6    | password   | varchar(255) | ✓        |       |
| 7    | state  | bool         | ✓        |       |
| 8    | crationDate  | date         | ✓        |       |
| 9    | modifyDate   | date         | ✓        |       |
| 10   | modifyHour   | time         | ✓        |       |

### 3. Modelo: default (PostgreSQL)

Versión: 16.0

1 base de datos se enumera a continuación.

#### 3.1. Base de datos: default

1 esquema se enumera a continuación.

##### 3.1.1. Esquema: public


Objetos de base de datos que se enumerarán: 1 table

##### 3.1.1.1. Tablas

##### 3.1.1.1.1. Tabla: Ecosystem

Tabla maestra de conexiones de cada ecosistema existente

##### Campos

| Pos. | Nombre   | Tipo         | Not Null | Otros |
|------|--|--------------|----------|-------|
| 1    | id  | uuid         | ✓        |       |
| 2    | name   | varchar(255) | ✓        |       |
| 3    | address  | varchar(255) |          |       |
| 4    | email  | varchar(255) |          |       |
| 5    | phoneNumber  | varchar(255) |          |       |
| 6    | connectionName   | varchar(255) | ✓        |       |
| 7    | connectionHost   | varchar(255) | ✓        |       |
| 8    | connectionPort   | varchar(255) | ✓        |       |
| 9    | connectionUser   | varchar(255) | ✓        |       |
| 10   | connectionPass   | varchar(255) | ✓        |       |
| 11   | connectionDataBase   | varchar(255) | ✓        |       |
| 12   | connectionUrl  | varchar(255) | ✓        |       |
| 13   | creationDate   | date         | ✓        |       |
| 14   | modifyDate   | date         | ✓        |       |
| 15   | deleted  | bool         | ✓        |       |