

Da Vinci Smart Manufacturing

BRD S04.01.02 Master Data Material **Maintenance ByProducts**

Version	Created/Modified by	Description	Date
1.0	Sahana Badal	S04.01.02 First Draft	14/07/2025
2.0	Sahana Badal	S04.01.02 Second Draft	23/07/2025

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1. By Prodcuts List Screen

This is designed to provide a comprehensive and user-friendly interface for managing By Prodcuts, including both active and inactive materials. **This data is populated from an external system and are loaded initially in inactive state.** Users can filter, search, and sort materials based on various parameters like Material Type and Material Status.

Header Section

- **Title:** "MM : By Prodcuts"
- **Stats Section:** Total count of Active | Inactive
- **Search Bar:** Tooltip text: Search by Material ID / Material Name
- **Filters:**
 - Material Type -
 - Multi-select Dropdown
 - All Material Types related to By Prodcuts
 - Status -
 - Multiselect Dropdown:
 - Values: Active | Inactive
 - Clear Filter - This will clear all the applied filters
 - All Filter drop downs should be sorted alphabetically / numerically

Material List Section

Users can view the list of all By Prodcuts, including both active and inactive materials. This data is populated from an external system and are loaded initially in inactive state. Users can filter, search, and sort materials based on various parameters like Material Type and Material Status. The table will have the following columns:

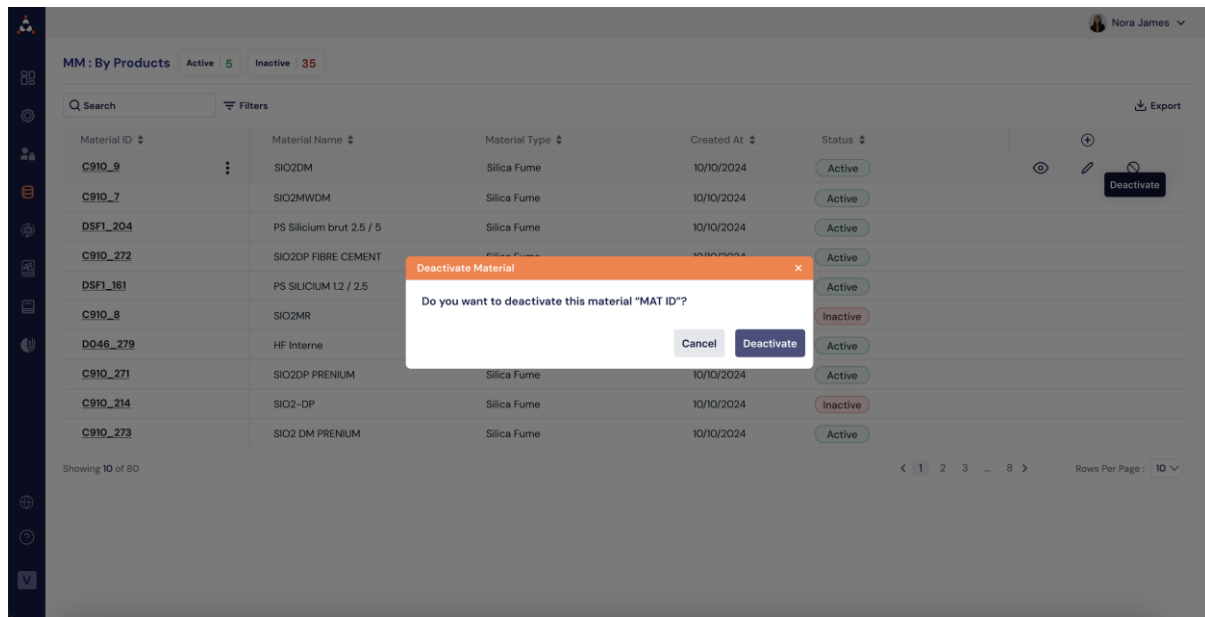
Table Default Sorting : Latest Modified first

- ☐ **Material ID:**
 - **Material ID**
 - Sorting: Yes
 - Frozen - Yes
- ☐ **Material Name:**
 - **Material Name corresponding to the Material ID**
 - Sorting: Yes
 - Frozen: No
- ☐ **Material Type:**
 - Material Type, the material ID belongs to
 - Sorting: Yes
 - Frozen: No
- ☐ **Created At:** **CR-VD-5347**
 - **Date and time Material was created as per ERP system**
 - Sorting: Yes

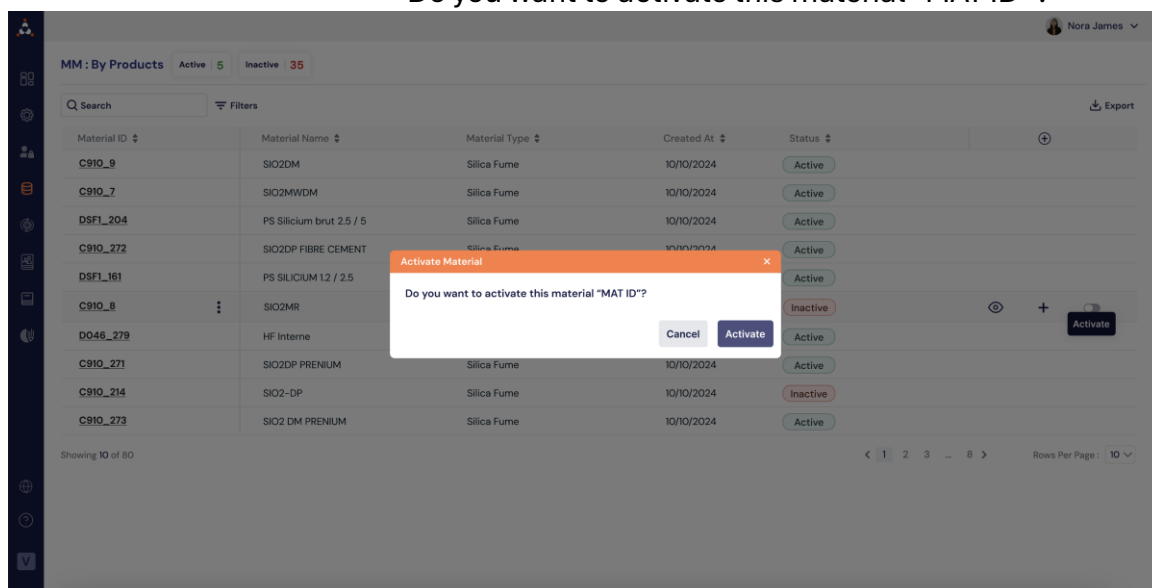
- Frozen: No
- ☐ **Created By** [CR-VD-5347](#)
 - Auto-populated as “System“
 - Sorting: Yes
 - Frozen: No
- ☐ **Modified At** [CR-VD-5347](#)
 - Last record modified Date and time
 - Sorting: Yes
 - Frozen – No
- ☐ **Modified By** [CR-VD-5347](#)
 - User ID | First Name Last Name of user who last modified the record
 - Sorting: Yes
 - Frozen – No
- ☐ **Status:** Indicates the status of the record (Draft, New, Linked, Rejected).
 - **Active** –Material that are activated in the system.
 - **Inactive** – Material imported from the ERP are initially marked as inactive or have been deactivated within the system.
 - Sorting: Yes
 - Frozen: No

Note: Horizontal scroll is required to be able to navigate through all columns and visualize all data but always respecting the frozen columns.

- **Action Buttons:** Depending on the status, allows users to edit or view the record. Only users with Create/Edit permissions on the module can activate, edit, or deactivate materials.
 - **Active:**
 - View – Record details can be viewed in non-editable mode
 - Edit - Details can be edited in the Material Information and Specification tab.
 - Deactivate - [CR-VD-4481](#) Users can deactivate an active material, which moves it to an inactive state. Deactivate the material after a confirmation message
 - “Do you want to deactivate this material “MAT ID”?”



- **Inactive: Material Information tab details have not been saved**
 - View – Record details can be viewed in non-editable mode
 - Add Details – Additional details can be included in the Material Information and Specification tab.
- **Inactive: Material Information tab details have been saved**
 - View – Record details can be viewed in non-editable mode
 - Edit - Details can be edited in the Material Information and Specification tab.
 - Activate - **CR-VD-4481** Users with the appropriate permissions can activate an inactive material by adding additional information and specifying the material's elemental specifications. Activate the material after a confirmation message
 - “Do you want to activate this material “MAT ID”?”



- **Pagination Controls:** Navigation buttons to browse through multiple pages of records, if applicable (for more than 10 records).

- Rows Per page : Default 10, Dropdown values: 10, 20, 30, 40, 50

Export Function: The export function must extract ALL the information of the columns available on list screen even they are not displayed.

CR-VD-5348

Material ID	Material Name	Material Type	Created At	Created By	Modified At	Modified By	Status
D030_24	Bec 0/25	By Prodcuts	04/06/2025 06:27 AM	Sahana Sahana Badal			Active
D030_103	Ferreux	By Prodcuts	04/06/2025 06:27 AM	Sahana Sahana Badal	04/06/2025 06:27 AM	Sahana Sahana Badal	Active
D030_108	Bec 0/25	By Prodcuts	04/06/2025 06:27 AM	Sahana Sahana Badal	04/06/2025 06:27 AM	Sahana Sahana Badal	Inactive
D030_23	Bec 0/25	By Prodcuts	04/06/2025 06:27 AM	Sahana Sahana Badal	04/06/2025 06:27 AM	Sahana Sahana Badal	Active
XXXX_186	Cible Haut Alu	By Prodcuts	04/06/2025 06:27 AM	Sahana Sahana Badal			Inactive
XXXX_198	Cible DopE P	By Prodcuts	04/06/2025 06:27 AM	Sahana Sahana Badal	04/06/2025 06:27 AM		Inactive

D030_2	Si 0/18 recoulEe	By Prodcuts	04/06/2025 06:27 AM	Sahana Sahana Badal			Inactiv e
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Exported File Name: “ByProdcuts_DD-MM-YYYY”

Customize Columns: Users can enable or disable all columns based on their preference. Only the enabled columns will be visible in the list. Columns marked as ‘frozen’ will be enabled by default and cannot be modified.

The screenshot shows the 'MM: By Products' table with 10 columns: Material ID, Material Name, Material Type, Created At, Status, and three empty columns. The table contains 10 rows of data. A 'Customize Columns' dialog is open on the right, showing a search bar and a list of columns with toggle switches. The columns and their toggle states are: Material ID (disabled), Material Name (enabled), Material Type (enabled), Status (enabled), Created At (enabled), Created By (disabled), Modified At (disabled), and Modified By (disabled).

Material ID	Material Name	Material Type	Created At	Status
C910_9	SIO2DM	Silica Fume	10/10/2024	Active
C910_7	SIO2MWDM	Silica Fume	10/10/2024	Active
DSF1_204	PS Silicium brut 2.5 / 5	Silica Fume	10/10/2024	Active
C910_272	SIO2DP FIBRE CEMENT	Silica Fume	10/10/2024	Active
DSF1_161	PS SILICIUM 1.2 / 2.5	Silica Fume	10/10/2024	Active
C910_8	SIO2MR	Silica Fume	10/10/2024	Inactive
D046_279	HF Interne	Silica Fume	10/10/2024	Active
C910_271	SIO2DP PRENIUM	Silica Fume	10/10/2024	Active
C910_214	SIO2-DP	Silica Fume	10/10/2024	Inactive
C910_273	SIO2 DM PRENIUM	Silica Fume	10/10/2024	Active

The screenshot shows the 'MM: By Products' table with the same data as the previous screenshot. The 'FILTERS' panel is open on the right, showing a 'Material Type' dropdown menu and a 'Status' dropdown menu. Both dropdowns are currently set to 'Select'.

Material ID	Material Name	Material Type	Created At	Status
C910_9	SIO2DM	Silica Fume	10/10/2024	Active
C910_7	SIO2MWDM	Silica Fume	10/10/2024	Active
DSF1_204	PS Silicium brut 2.5 / 5	Silica Fume	10/10/2024	Active
C910_272	SIO2DP FIBRE CEMENT	Silica Fume	10/10/2024	Active
DSF1_161	PS SILICIUM 1.2 / 2.5	Silica Fume	10/10/2024	Active
C910_8	SIO2MR	Silica Fume	10/10/2024	Inactive
D046_279	HF Interne	Silica Fume	10/10/2024	Active
C910_271	SIO2DP PRENIUM	Silica Fume	10/10/2024	Active
C910_214	SIO2-DP	Silica Fume	10/10/2024	Inactive
C910_273	SIO2 DM PRENIUM	Silica Fume	10/10/2024	Active

2. Add Material Details

This screen will allow users to input and manage records, organised into two Tabs: Material Information and Material Specification. Mandatory fields will be marked with an asterisk (*). Below is a detailed layout incorporating the requirements.

Header: Back Icon | **C910_8** | **SIO2MR** (Material ID | Material Name)

Material Information Tab

CR-VD-4658

- **Scenario 1: ERP ID exists, but no Ops ID**
 - Material ID = ERP Material ID
 - Material Name
 - Material Type
 - Status
 - Date Created
 - Material Description
- **Scenario 2: ERP ID and Ops ID exist with a one-to-one mapping**
 - Material ID = ERP Material ID = OPS Material ID
 - Material Name
 - Material Type
 - Status
 - Date Created
 - Material Description
- **Scenario 3: ERP ID and Ops ID exist and are different (i.e., no one-to-one mapping)**
 - Material ID = (Concatenation of ERP ID and Ops ID)
 - Material Name
 - ERP Commercial Material ID
 - ERP Commercial Material Name
 - Ops Technical Material ID
 - Material Type
 - Status
 - Date Created
 - Material Description

Additional Information - These details are to be captured here, they are the following

- **Effective Date*:**
 - User selects the date from a calendar selector. The system shall allow users to capture a set of values with an effective date, which can be in the past, present, or future.
 - Mandatory - Yes
 - Default value - Current date

- Field Type - Calendar picker
- Validation - No
- **Unit Weight***
 - User inputs the unit weight value
 - Mandatory - Yes
 - Default value - None
 - Field Type - User input
 - Validation - Numeric 2 decimal values. Max allowed 99,999,999.99
 - Units - Kg
- **Density**
 - User inputs the value
 - Mandatory - No
 - Default value - None
 - Field Type - User input
 - Validation - Numeric 4 decimal values. Max allowed 99,999,999.9999
 - Units - Depending on Unit System setup on Plant config (g/l metric system or lbm/ft^3)

Action Buttons

- **Save & Continue:**
 - Upon saving the details, the user is redirected to the **Material Specification** tab.
 - On the **list screen**:
 - Since the first tab's details have been entered,
 - An **Edit** option will appear in the **action menu** for the corresponding item.
 - Since Material Specification has default 0 values, User can now activate the material.
- **Cancel:** Cancels the current operation and returns to the list screen

← C910_9 | SIO2DM

Nora James

Material Information

Material Specification

Basic Information

Material ID	Material Name	ERP Commercial Material ID	ERP Commercial Material Name	Ops Technical Material ID
C910_9	SIO2DM	C9DM	MICROFUMEE CONCRETE DM	9
Material Type	Status	Date Created	Material Description	
Silica Fume	Active	01/21/2025	FUMEE DE SILICE DENSIFIEE MECANIQUE	

Additional Information

Effective Date*

18.08.24

Unit Weight*

12.00 t

Density*

5.00 g/cm³

Cancel Save & Continue

Material Specification Tab

- The Material Specification tab is not dependent on the completion or saving of the Material Information tab.
- Users can navigate to and save data under the Material Specification tab without saving the Material Information tab.
- The material cannot be activated unless all mandatory fields in the Material Information tab are filled in and saved successfully.
- Users can edit material specifications, including chemistry, physical and size specifications.
- Under this section “Low”, “Aim” and “High” values for various elements are captured. The elements are mapped to a particular material type.
- In Edit mode update of element values inserts a new set of records with the date.
- For any given date only one set can exist, the older values will be overwritten for an existing date. Thus, storing historical data will help generate reports with appropriate data for all dates.
- Historical data can be viewed by downloading the Excel file using the download option in View mode
- The list of elements for Chemical and Physical can be seen in the design provided.
- Material Specification tab is independent from Material Information tab and available to be saved at any point of time.
- **Each Chemistry element will have the following :** Fe, Si, C, Mn, Cr, Ni, Mo, V, Ti, Al, W, Nb, Co, Zr, B, P, S, Cu, Sn, Pb, Mg, Ca, Zn, As, Sb, Se, Te, Re, Ta, Hf, Sc, Y, La, Ce, Nd, Pr, Sm, Gd, Dy, Er, Be, Li, Na, K, Sr, Ga, Ge, Cd, In, Hg, Pt, Au
 - Low -
 - Editable and pre-populated with default value.
 - Default – 0 **CR-VD-4655**
 - Mandatory: No
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - It has to be lower than Aim and High
 - Aim
 - Editable and pre-populated with default value.
 - Default – 0 **CR-VD-4655**
 - Mandatory: No
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - The sum of all *Aim* values represents a percentage-based split of elements in the material. While it is **not required to total exactly 100%**, it **must not exceed 100%**. *Total aim value will be shown next to section heading.* A validation message that “Total value of elements should be less than 100%” will be displayed **CR-VD-3979**

← C910_9 | SIO2DM

Nora James

Material Information

Material Specification

Chemistry Elements (Total Aim : 0%)

Total value of elements should be less than 100%

Elements (in %)	Low	Aim	High
Al	0	0	0
As	0	0	0
Au	0	0	0
B	0	0	0
Be	0	0	0
C	0	0	0
Ca	0	0	0
Cd	0	0	0
Ce	0	0	0
Hf	0	0	0
Hg	0	0	0
In	0	0	0
K	0	0	0
La	0	0	0
Li	0	0	0
Mg	0	0	0
Mn	0	0	0
Mo	0	0	0
Sb	0	0	0
Sc	0	0	0
Se	0	0	0
Si	0	0	0
Sm	0	0	0
Sn	0	0	0
Sr	0	0	0
S	0	0	0
Ta	0	0	0

Cancel Save

- It has to be higher than Low and lower than High
 - High
 - Editable and pre-populated with default value.
 - Default – 0 **CR-VD-4655**
 - Mandatory: No
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - It has to be higher than Low and Aim
- **Each Physical element will have the following:** Ash, Moisture, Volatiles.
 - Low -
 - Editable and pre-populated with default value.
 - Mandatory - No
 - Default – 0 **CR-VD-4655**
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - It has to be lower than Aim and High
 - Aim
 - Editable and pre-populated with default value.
 - Mandatory - No
 - Default – 0 **CR-VD-4655**
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - The sum of all *Aim* values represents a percentage-based split of elements in the material. While it is **not required to total exactly 100%**, it **must not exceed 100%**. *Total aim value will be shown next to section heading.* A validation

message that “Total value of elements should be less than 100%” will be displayed **CR-VD-3979**

- It has to be higher than Low and lower than High
 - High
 - Editable and pre-populated with default value.
 - Mandatory - No
 - Default – 0 **CR-VD-4655**
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - It has to be higher than Low and Aim
- **Action Buttons**
 - **Save**
 - Upon saving the details, the user is redirected to the **List** page.
 - On the **list screen**:
 - Since both tab’s details have been entered,
 - An **Edit** option will appear in the **action menu** for the corresponding item.
 - User can now activate the material
 - **Cancel**: Cancels the current operation and returns to the list screen

C910_9 | SIO2DM

Nora James

Material Information

Material Specification

Chemistry Elements

Elements (in %)	Low	Aim	High
Al	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
As	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Au	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
B	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Be	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
C	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Ca	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Cd	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Ce	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Co	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Elements (in %)	Low	Aim	High
Hf	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Hg	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
In	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
K	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
La	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Li	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Mg	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Mn	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Mo	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Na	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Elements (in %)	Low	Aim	High
Sb	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Sc	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Se	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Si	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Sm	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Sn	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Sr	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
S	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Ta	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Te	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Cancel

Save

← C910_9 | SIO2DM

Elements (in %)	Low	Aim	High
Cu	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
C	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Dy	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Er	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Fe	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Ga	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Gd	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Elements (in %)	Low	Aim	High
Nd	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Ni	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
P	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Pb	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Pr	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Pt	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
P	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Elements (in %)	Low	Aim	High
V	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
W	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Y	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Zn	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Zr	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Physical Elements

Elements (in %)	Low	Aim	High
Ash	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Elements (in %)	Low	Aim	High
Moisture	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Elements (in %)	Low	Aim	High
Volatiles	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Cancel

Save

3. Edit Material Details

- This screen will allow users to input and manage records, organized into two Tabs: Material Information and Material Specification. Mandatory fields will be marked with an asterisk (*). Below is a detailed layout incorporating the requirements.
- **Header:** Back Icon | **C910_8 | SIO2MR** (Material ID | Material Name)

MM: By Products Active 5 Inactive 35

Q Search Filters Export

Material ID	Material Name	Material Type	Created At	Status	
C910_9	SIO2DM	Silica Fume	10/10/2024	Active	+
C910_7	SIO2MWDM	Silica Fume	10/10/2024	Active	Eye Edit
DSF1_204	PS Silicium brut 2.5 / 5	Silica Fume	10/10/2024	Active	
C910_272	SIO2DP FIBRE CEMENT	Silica Fume	10/10/2024	Active	
DSF1_161	PS SILICIUM 1.2 / 2.5	Silica Fume	10/10/2024	Active	
C910_8	SIO2MR	Silica Fume	10/10/2024	Inactive	
D046_279	HF Interne	Silica Fume	10/10/2024	Active	
C910_271	SIO2DP PREMIUM	Silica Fume	10/10/2024	Active	
C910_214	SIO2-DP	Silica Fume	10/10/2024	Inactive	
C910_273	SIO2 DM PREMIUM	Silica Fume	10/10/2024	Active	

Showing 10 of 80 < 1 2 3 ... 8 > Rows Per Page: 10

Material Information Tab

CR-VD-4658

- Scenario 1: ERP ID exists, but no Ops ID**
 - Material ID = ERP Material ID
 - Material Name
 - Material Type
 - Status
 - Date Created
 - Material Description
- Scenario 2: ERP ID and Ops ID exist with a one-to-one mapping**
 - Material ID = ERP Material ID = OPS Material ID
 - Material Name
 - Material Type
 - Status
 - Date Created
 - Material Description
- Scenario 3: ERP ID and Ops ID exist and are different (i.e., no one-to-one mapping)**
 - Material ID = (Concatenation of ERP ID and Ops ID)
 - Material Name
 - ERP Commercial Material ID
 - ERP Commercial Material Name
 - Ops Technical Material ID
 - Material Type
 - Status
 - Date Created
 - Material Description

Additional Information -

- When viewed in edit mode, only the current values of fields (based on effective date) will be displayed. If a recently updated value is older than the current value, it will be saved. However, these values will not be displayed in edit mode but can be viewed by downloading the Excel history.
- Only one value can exist for a given effective date. In Edit mode, if a record with the same effective date already exists in the system, the user will receive a warning and be asked if they want to proceed and overwrite the existing details.
- Historical and future data can be viewed by downloading the Excel file using the download option in View mode.
 - **Effective Date***:
 - Editable and pre-populated with the existing value.
 - Default value - Current date
 - Mandatory: Yes
 - **Unit Weight***
 - Editable and pre-populated with the existing value.
 - Default value - None
 - Mandatory: Yes
 - **Density**
 - Editable and pre-populated with the existing value.
 - Default value - None
 - Mandatory: No
- **Action Buttons**
 - **Save & Continue:**
 - Upon saving the details, the user is redirected to the **Material Specification** tab.
 - On the **list screen**:
 - An **Edit** option will appear in the **action menu** for the corresponding item.
 - Since Material Specification has default 0 values, User can now activate the material.
 - **Cancel:** Cancels the current operation and returns to the list screen

C910_9 | SIO2DM

Nora James

Material Information

Basic Information

Material ID	Material Name	ERP Commercial Material ID	ERP Commercial Material Name	Ops Technical Material ID
C910_9	SIO2DM	C9DM	MICROFUMEE CONCRETE DM	9
Material Type	Status	Date Created	Material Description	
Silica Fume	Active	01/21/2025	FUMEE DE SILICE DENSIFIEE MECANIQUE	

Additional Information

Effective Date*

18.08.24

Unit Weight*

Density*

12.00
t

5.00
g/cm³

Material Specification

Cancel
Save & Continue

Material Specification Tab

- Users can edit material specifications, including chemistry, physical and size specifications.
- Under this section “Low”, “Aim” and “High” values for various elements are captured. The elements are mapped to a particular material type.
- In Edit mode update of element values inserts a new set of records with the date.
- For any given date only one set can exist, the older values will be overwritten for an existing date. Thus, storing historical data will help generate reports with appropriate data for all dates.
- Historical data can be viewed by downloading the Excel file using the download option in View mode
- The list of elements for Chemical and Physical can be seen in the design provided.
- **Each Chemistry element will have the following**
 - Low -
 - Editable and pre-populated with the existing value.
 - Default – 0 **CR-VD-4655**
 - Mandatory: No
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - It has to be lower than Aim and High
 - Aim
 - Editable and pre-populated with the existing value.
 - Default – 0 **CR-VD-4655**
 - Mandatory: No
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point

- The sum of all *Aim* values represents a percentage-based split of elements in the material. While it is **not required to total exactly 100%**, it **must not exceed 100%**. *Total aim value will be shown next to section heading*. A validation message that “Total value of elements should be less than 100%” will be displayed **CR-VD-3979**
 - It has to be higher than Low and lower than High
 - o High
 - Editable and pre-populated with the existing value.
 - Default – 0 **CR-VD-4655**
 - Mandatory: No
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - It has to be higher than Low and Aim
- **Each Physical element will have the following**
 - o Low -
 - Editable and pre-populated with the existing value.
 - Mandatory - No
 - Default – 0 **CR-VD-4655**
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - It has to be lower than Aim and High
 - o Aim
 - Editable and pre-populated with the existing value.
 - Mandatory - No
 - Default – 0 **CR-VD-4655**
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point
 - The sum of all *Aim* values represents a percentage-based split of elements in the material. While it is **not required to total exactly 100%**, it **must not exceed 100%**. Total aim value will be shown next to section heading. A validation message that “Total value of elements should be less than 100%” will be displayed **CR-VD-3979**
 - It has to be higher than Low and lower than High
 - o High
 - Editable and pre-populated with the existing value.
 - Mandatory - No
 - Default – 0 **CR-VD-4655**
 - Field Validation -
 - only integers, Max 100/ Min 0, 3 integers and Four places after decimal point

- It has to be higher than Low and Aim
- **Action Buttons**
 - **Save**
 - Upon saving the details, the user is redirected to the **List** page.
 - On the **list screen**:
 - Since both tab's details have been entered,
 - An **Edit** option will appear in the **action menu** for the corresponding item.
 - User can now activate the material
 - **Cancel**: Cancels the current operation and returns to the list screen

4. View Material

This screen will allow users to input and manage records, organised into two Tabs: Material Information and Material Specification. Mandatory fields will be marked with an asterisk (*). Below is a detailed layout incorporating the requirements.

Header: Back Icon | **D030_24 | Bec 0/25** ((Material ID | Material Name) | **Edit Icon:** Allows users to switch from view mode to edit mode to update the record.

Material ID	Material Name	Material Type	Created At	Status
C910_9	SIO2DM	Silica Fume	10/10/2024	Active
C910_7	SIO2MWD	Silica Fume	10/10/2024	Active
DSF1_204	PS Silicium brut 2.5 / 5	Silica Fume	10/10/2024	Active
C910_272	SIO2DP FIBRE CEMENT	Silica Fume	10/10/2024	Active
DSF1_161	PS SILICIUM 1.2 / 2.5	Silica Fume	10/10/2024	Active
C910_8	SIO2MR	Silica Fume	10/10/2024	Inactive
D046_279	HF Interne	Silica Fume	10/10/2024	Active
C910_271	SIO2DP PREMIUM	Silica Fume	10/10/2024	Active
C910_214	SIO2-DP	Silica Fume	10/10/2024	Inactive
C910_273	SIO2 DM PREMIUM	Silica Fume	10/10/2024	Active

Material Information Tab

- **CR-VD-4658**
- **Scenario 1: ERP ID exists, but no Ops ID**
 - Material ID = ERP Material ID
 - Material Name
 - Material Type
 - Status
 - Date Created
 - Material Description
- **Scenario 2: ERP ID and Ops ID exist with a one-to-one mapping**
 - Material ID = ERP Material ID = OPS Material ID
 - Material Name
 - Material Type
 - Status
 - Date Created
 - Material Description
- **Scenario 3: ERP ID and Ops ID exist and are different (i.e., no one-to-one mapping)**
 - Material ID = (Concatenation of ERP ID and Ops ID)
 - Material Name
 - ERP Commercial Material ID
 - ERP Commercial Material Name
 - Ops Technical Material ID

- Material Type
- Status
- Date Created
- Material Description

Additional Information - These details are to be captured here, they are the following

- **Effective Date:**
 - **Export Icon:**
 - Historical and future data can be viewed by downloading the CSV file using the download option.
 - The tooltip should read “Download CSV”. [CR-VD-4482](#)
 - Downloads the record in CSV format.
 - The file must include the following headers and display the values as the following example: [CR-VD-5348](#)
 - Exported File Name: “**By Prodcuts_Additional_Information_DD-MM-YYYY**”


[CR-VD-4489](#)

Effective Date	Material ID	Material Name	Material Type	Unit Weight	Density		Created By		Modified By
22/05/25	05C910_8	SIO2MR	Silica Fume	12.00t	1.00 g/cm ³		superuser superuser Rose Danish		superuser superuser Rose Danish

- **Unit Weight**
- **Density**


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C910_9 | SIO2DM



Material Information

Material Specification

Basic Information						
Material ID	Material Name	ERP Commercial Material ID	ERP Commercial Material Name	Ops Technical Material ID		
C910_9	SIO2DM	C9DM	MICROFUMEE CONCRETE DM	9		
Material Type	Status	Date Created	Material Description			
Silica Fume	Active	01/21/2025	FUMEE DE SILICE DENSIFIEE MECANIQUE			
Additional Information						
Effective Date						
18.08.24 						
Unit Weight*	Density					
12.00 t	5.00 g/cm³					

Material Specification Tab

Chemistry, Physical of various elements will be available in read only mode.

Each Chemistry element will have the following

- Low
- Aim
- High

Each Physical element will have the following

- Low
- Aim
- High

Export Specification

- Historical data can be viewed by downloading the Excel file using the download option.
- The tooltip should read “Download CSV” **CR-VD-4482**
- Downloads the record in CSV format.
- The file must include the following headers and display the values as the following example: **CR-VD-5348**
- Exported File Name: “**By Prodcuts_MaterialSpecification_DD-MM-YYYY**”

CR-VD-4489

Element (in %)	Element Group	Low	AIM	High	Plant Material	Plant	Created At	Created By	Modified At	Modified By
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				rial ID					
Al	CHE	0	0	708	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
As	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Au	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Be	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
B	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Ca	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Cd	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Ce	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Co	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Cr	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Cu	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
C	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Dy	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Er	CHE	0	0	08	6V_C 910_ 8	02/06/2025 6V 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish

Fe	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Ga	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Gd	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Ge	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Hf	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Hg	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
In	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
K	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
La	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Li	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Mg	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Mn	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Mo	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Na	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Nb	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish

Nd	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Ni	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Pb	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Pr	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Pt	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
P	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Re	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Sb	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Sc	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Se	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Si	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Sm	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Sn	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Sr	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
S	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish

Ta	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Te	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Ti	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
V	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
W	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Y	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Zn	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Zr	CHE	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Ash	PHY	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Moistur e	PHY	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish
Volatile s	PHY	0	0	08	6V_C 910_ 6V	02/06/2025 07:52 AM	superuser Rose Danish	02/06/2025 07:52 AM	superuser Rose Danish

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C910_9 | SIO2DM

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Material Information

Material Specification

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View Change History

Chemistry Elements

Elements (in %)	Low	Aim	High
Al	0	0	0
As	0	0	0
Au	0	0	0
Be	0	0	0
B	0	0	0
Ca	0	0	0
Cd	0	0	0
Ce	0	0	0
Co	0	0	0

Elements (in %)	Low	Aim	High
Hf	0	0	0
Hg	0	0	0
In	0	0	0
K	0	0	0
La	0	0	0
Li	0	0	0
Mg	0	0	0
Mn	0	0	0
Mo	0	0	0

Elements (in %)	Low	Aim	High
Sb	0	0	0
Sc	0	0	0
Se	0	0	0
Si	0	0	0
Sm	0	0	0
Sn	0	0	0
Sr	0	0	0
S	0	0	0
Ta	0	0	0

View Change History

This button opens a modal or section showing a chronological list of all changes made to the record, including:

- Timestamp of change
- Field(s) modified
- Previous and updated values
- Name of the user who made the change
- **Export Icon - Downloads the records in CSV format, the tooltip should read “Download CSV”** [CR-VD-4482](#)
- **Export Filename - “By Prodcuts_ChangeHistory_DD-MM-YYYY”** [CR-VD-5348](#)

SPECIFICATION CHANGE HISTORY								
			Old			New		
Date	Username	Element	Low	Aim	High	Low	Aim	High
05/01/2025 09:00 AM	JSmithOperator	Al	0	0	0	1.9	2	2.45
04/01/2025 09:00 AM	superadmin	Ca	0	0	0	0	1	0
		Al	0	0	0	0	0	0
02/01/2025 07:00 AM	superadmin	Coarse Particles (>45um)	0	0	0	0	0	2.45
01/01/2025 09:00 AM	superadmin	Cl	0	0	0	0	1	0