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Operating Instructions
KERN EasyTouch

EasyTouch Formulation
User manual

Version 1.1
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GB

Contents

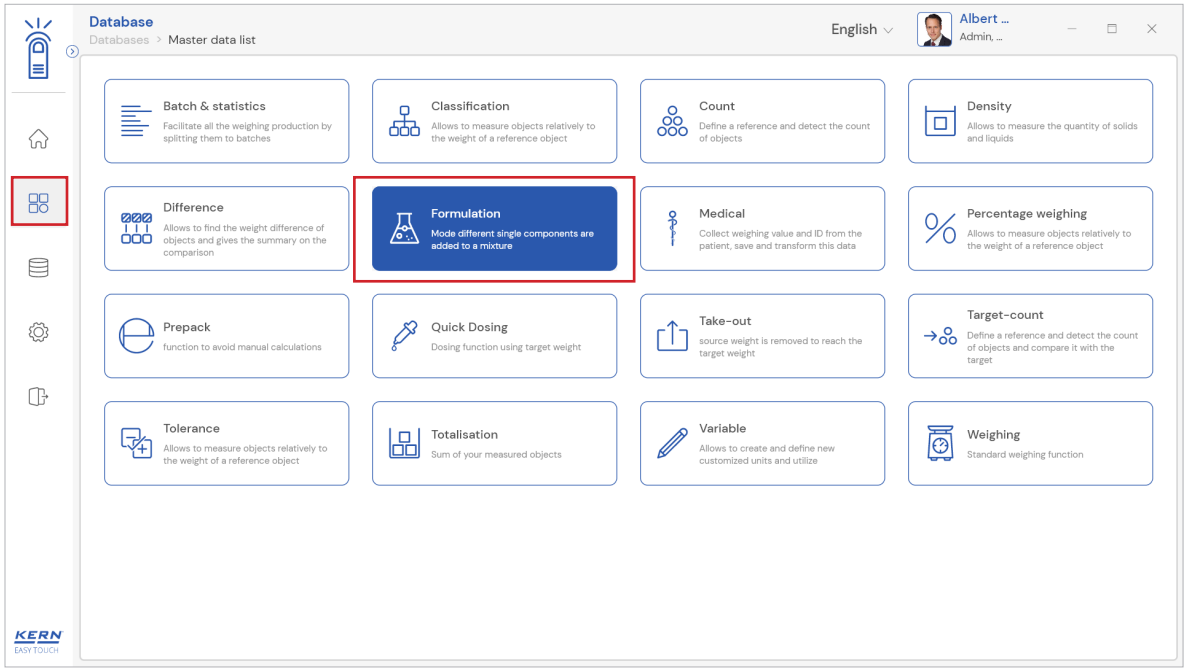
1.0 Introduction to formulation

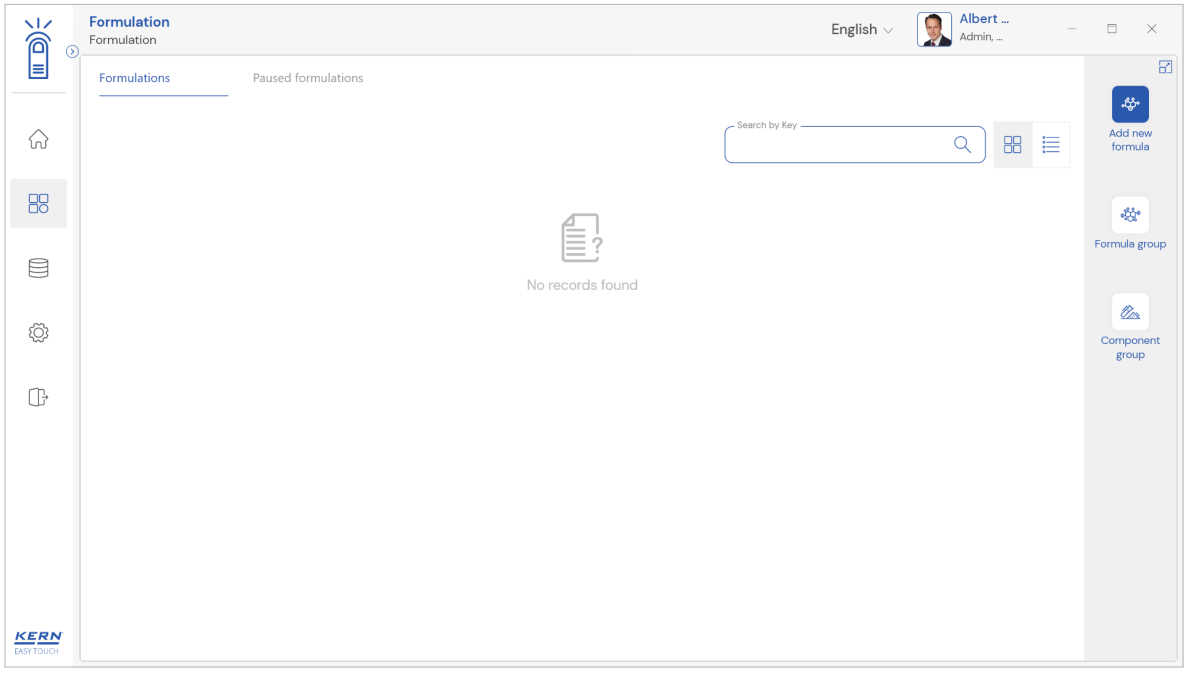
In the formulation mode, different single components are added to a produce a mixture. The nominal weights of individual raw materials or components can be defined for the known product quantity by the user.

The system will automatically calculate the individual weight of the components to be weighed to produce a product based on the entered new target weight by the user.

This function also allows the correction function to be applied incase of overdose or underdose during the measurement.

- Click on the “function” menu from the main wizard.
- The function list screen will open. Click on the formulation function from the function list.





English

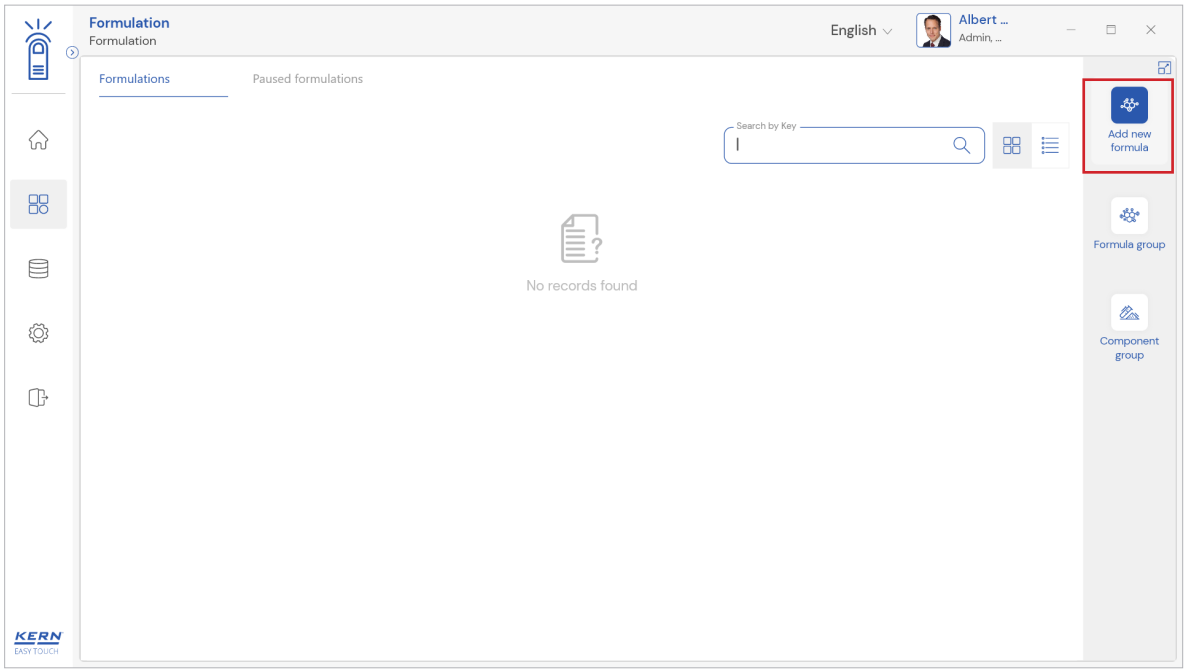
2.0 Creating a new formula

There were two ways to create a formula one is using the formulation function and the other is to utilize the master memory.

i. Using formulation function:

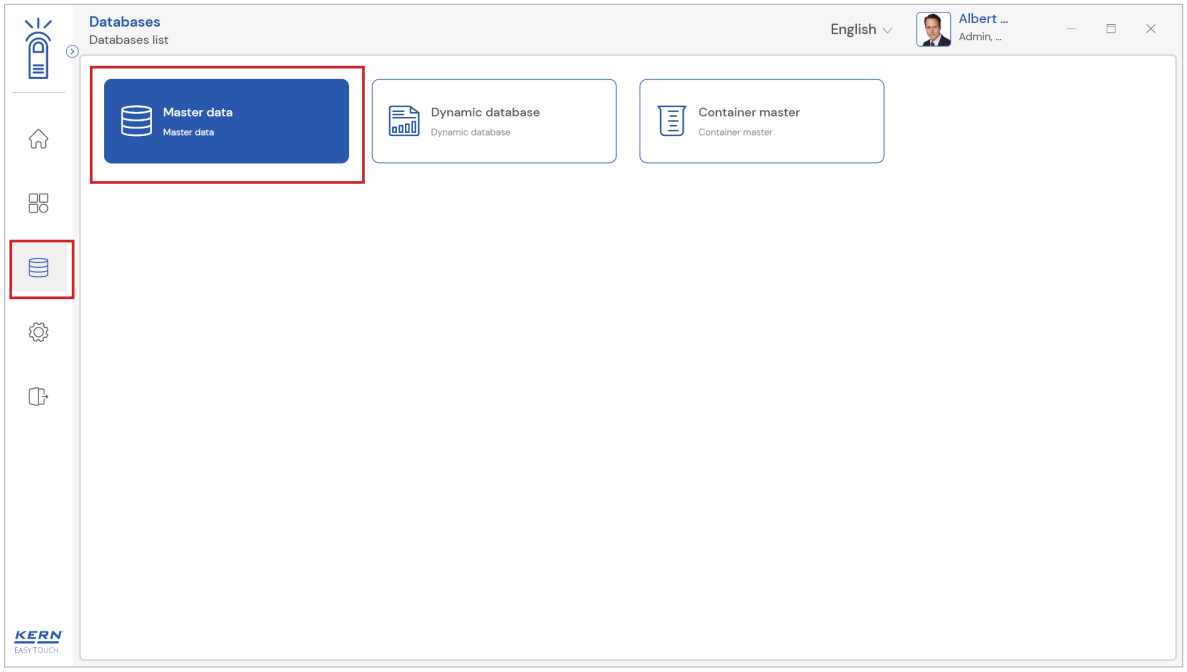
When you click on the formulation function, the provision to create a new formula will appear

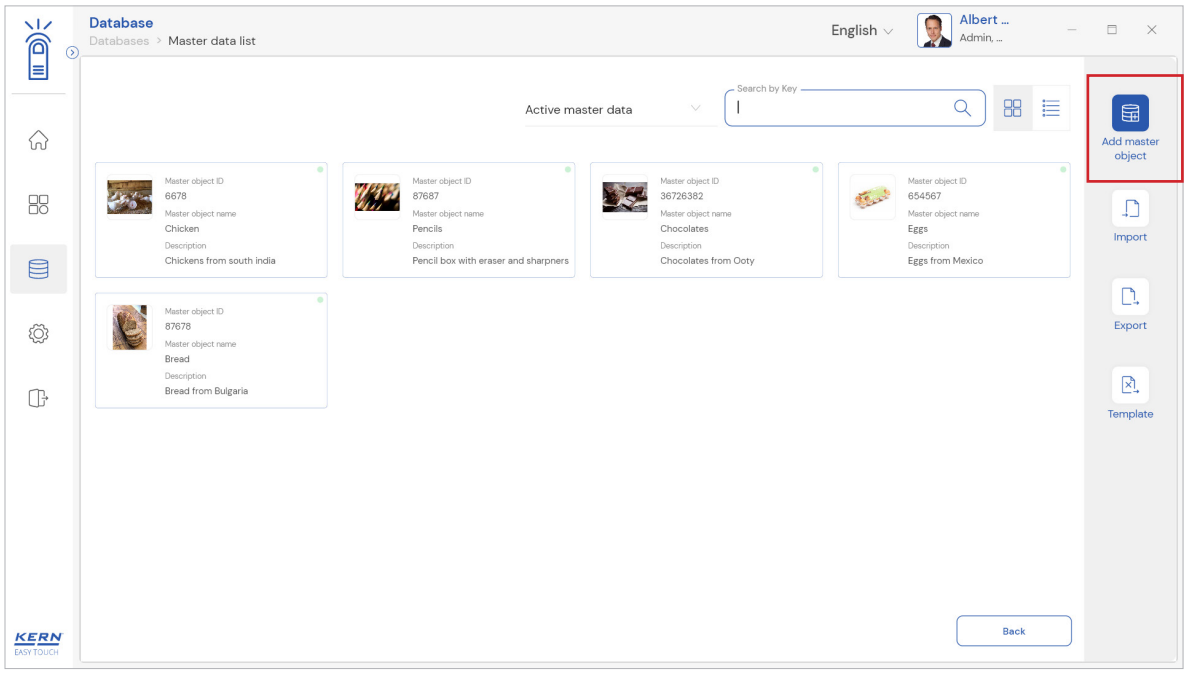
- Click the “add new formula” button and create a formula



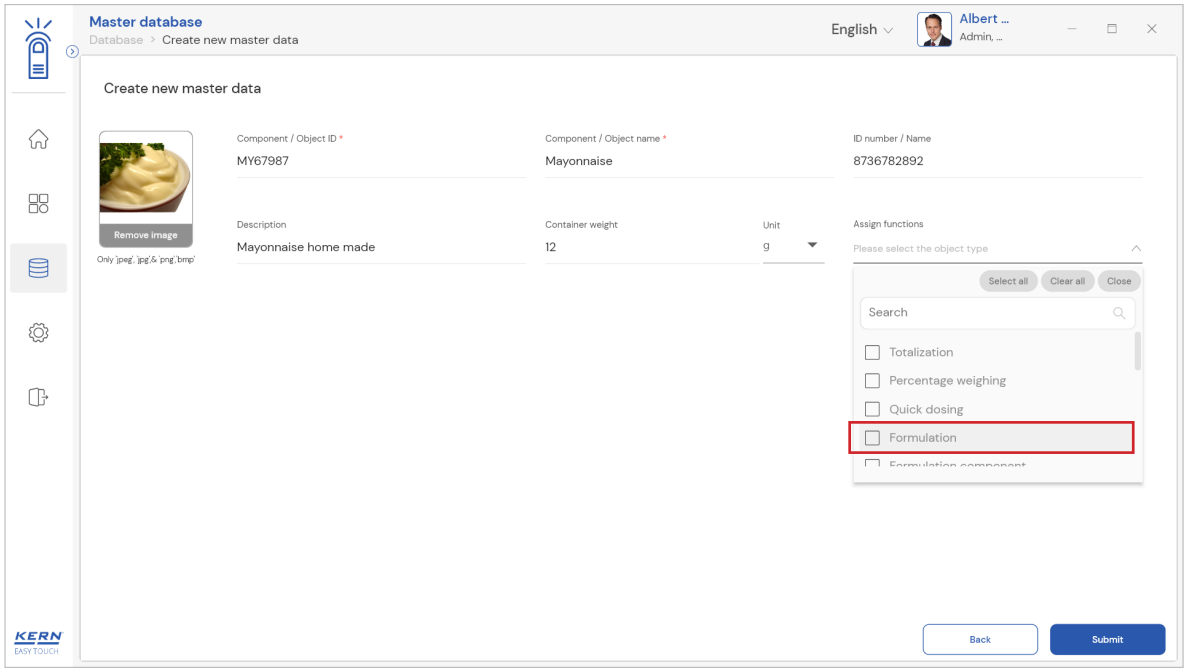
ii. Using master memory

- Click the database icon from the main menu
- The database list will be displayed and click on the “master database” from the list.

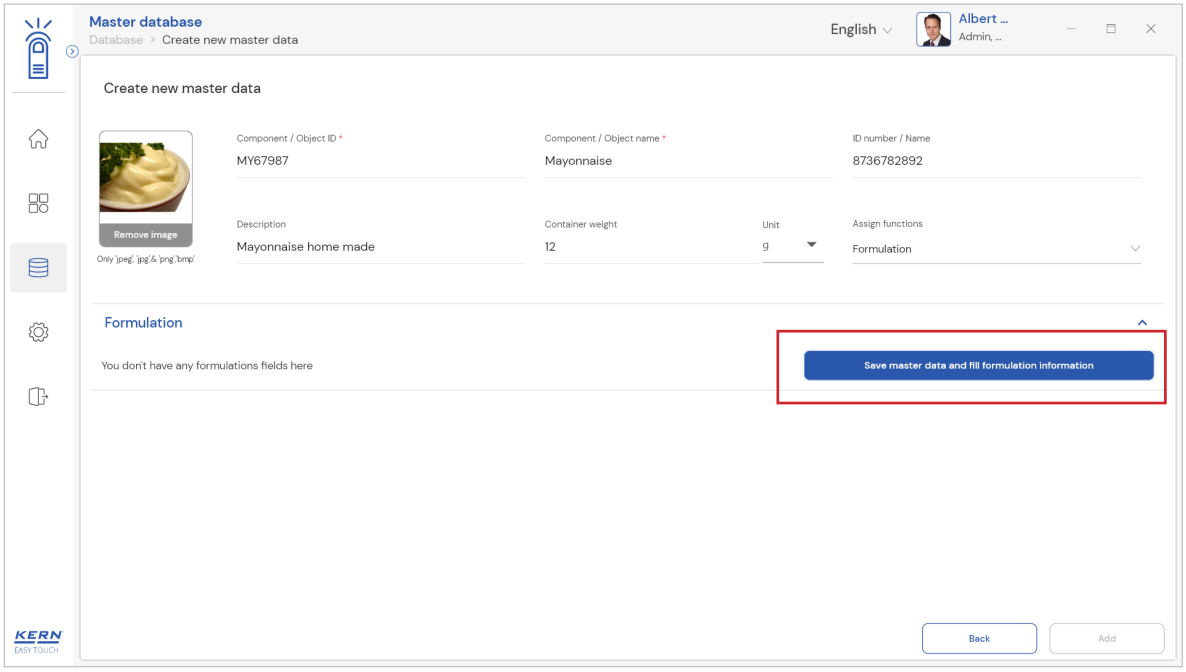




- The overview of the currently filled master data appears, by clicking on "add master object", the user can add a new master object with difference weighing and reuse it later in function if needed.

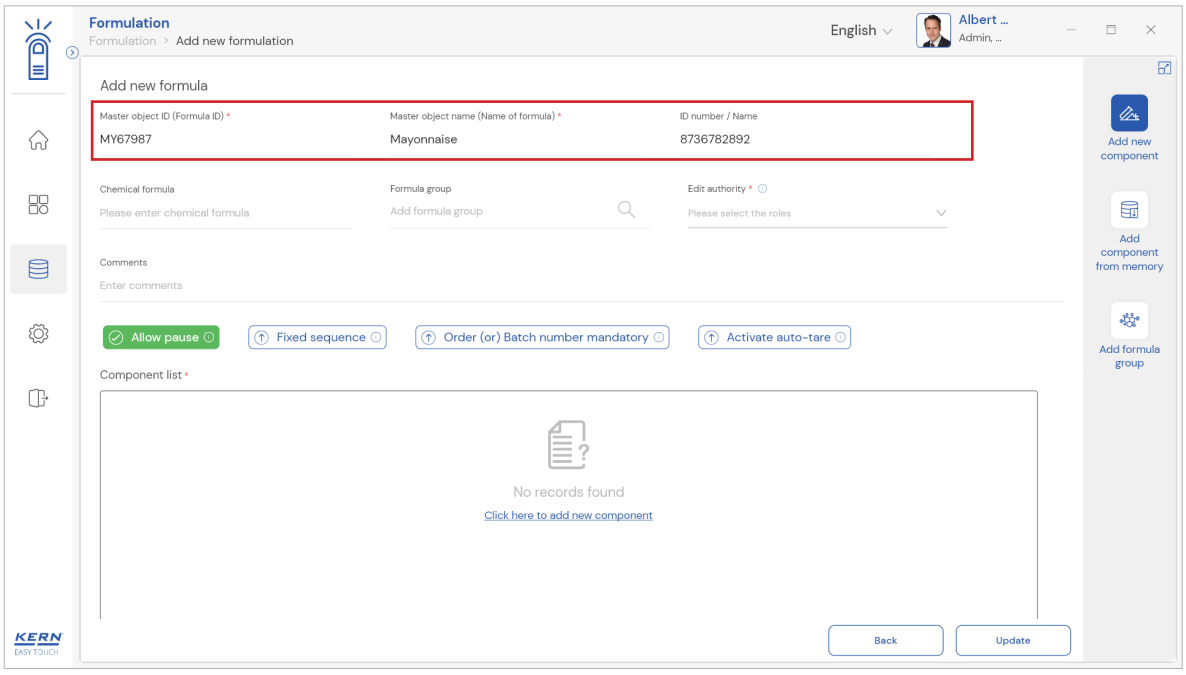


- The user can fill in the information as such component / object ID, component / object name, ID number / name, description, container weight and the image for the reference.
- When “formulation” is selected from the drop down, the user can now click on the “save master and fill formulation information” to create a formula.

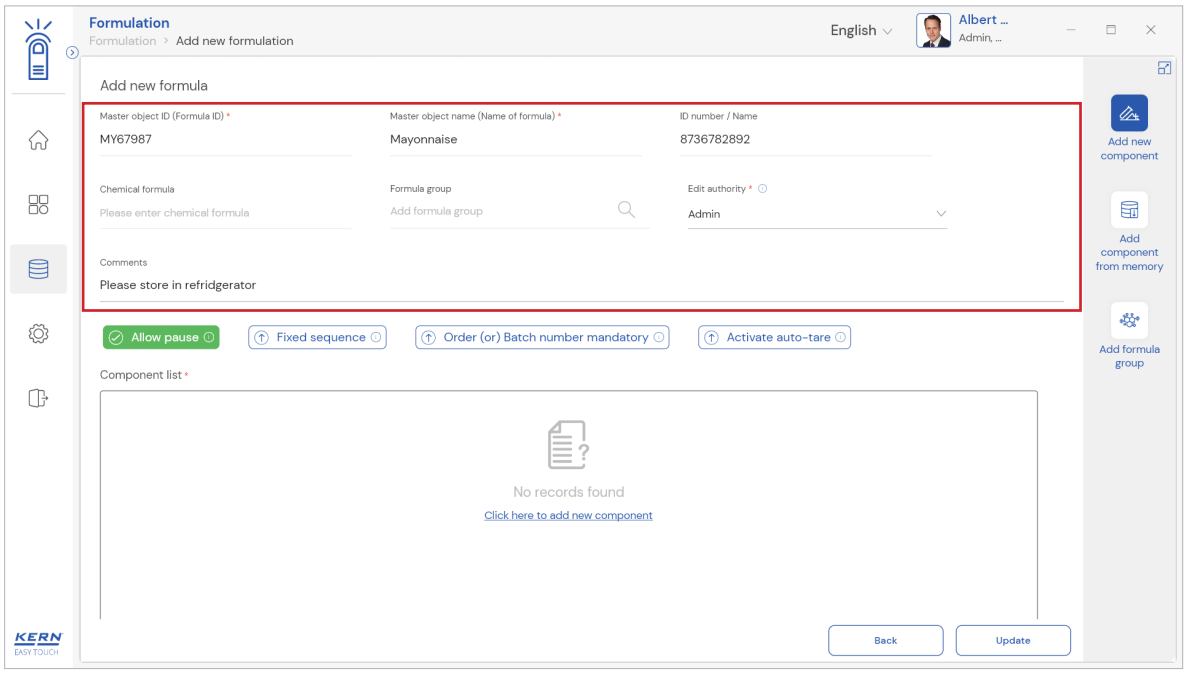


Procedure to define the properties of formula

- The below screen appears where the user can define the properties of the formula and additional features can be activated



- User can proceed in entering the below required properties



Master object Id: User can provide a unique object Id to the formula for the internal reference and user might be able to search based on the defined Id.

Master object name: User can provide a name to the formula. This might help in packaging or labelling and creating a barcode or QR code during the supply

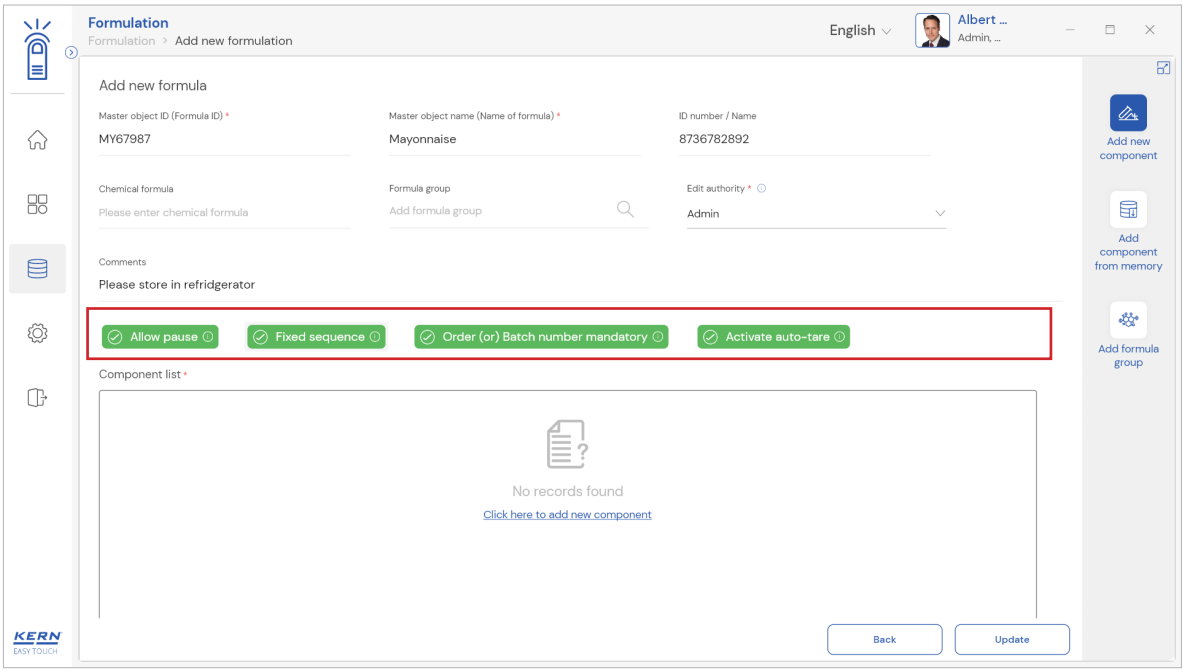
ID number / name: This is customized additional field maintained based on the industrial requirement where the users can provide an Id or name to the product as like an industrial or supplier code for the operator or internal users reference

Chemical formula: The formula of the recipe what the user is going to prepare can be entered here. This field is completely useful in case of chemical, petroleum, cosmetics, pharmaceutical industries.
Formula group: All the recipes created in the system can be grouped and segregated for the reference and quick search of the operators

Edit authority: This is a highly prominent field where the admin user might be able to define the users to modify the formula or recipe

Comments: The comments or suggestion to the operational and maintenance users can be given here
For illustration, the prepared recipe or formula might be a hazardous or highly volatile substance and the comments may help them with the handling of the recipe

And the below options to activate or inactivate will be available to the user



Allow pause: Enabling this option would allow the user to pause the formulation and resume it whenever required during the preparation or dosing of components
This option might be completely helpful in a case where the duration of addition to the components will be of varied time.

Fixed sequence: Enabling this option would allow the user to move to the next component for dosing only in fixed sequence.
For example, some recipes must be prepared in a way that addition of first component might be having some dependencies on the second component.

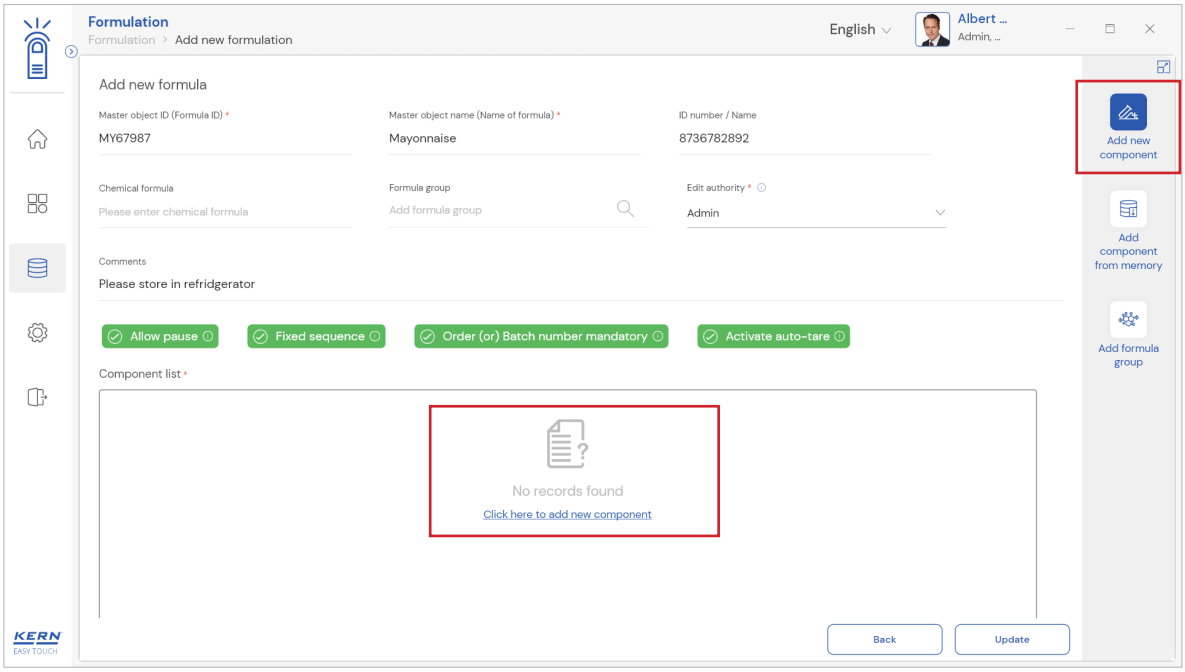
Order or batch number mandatory: Enabling this option would ask the user to enter the order or batch number mandatorily to proceed with addition or dosing of the next component

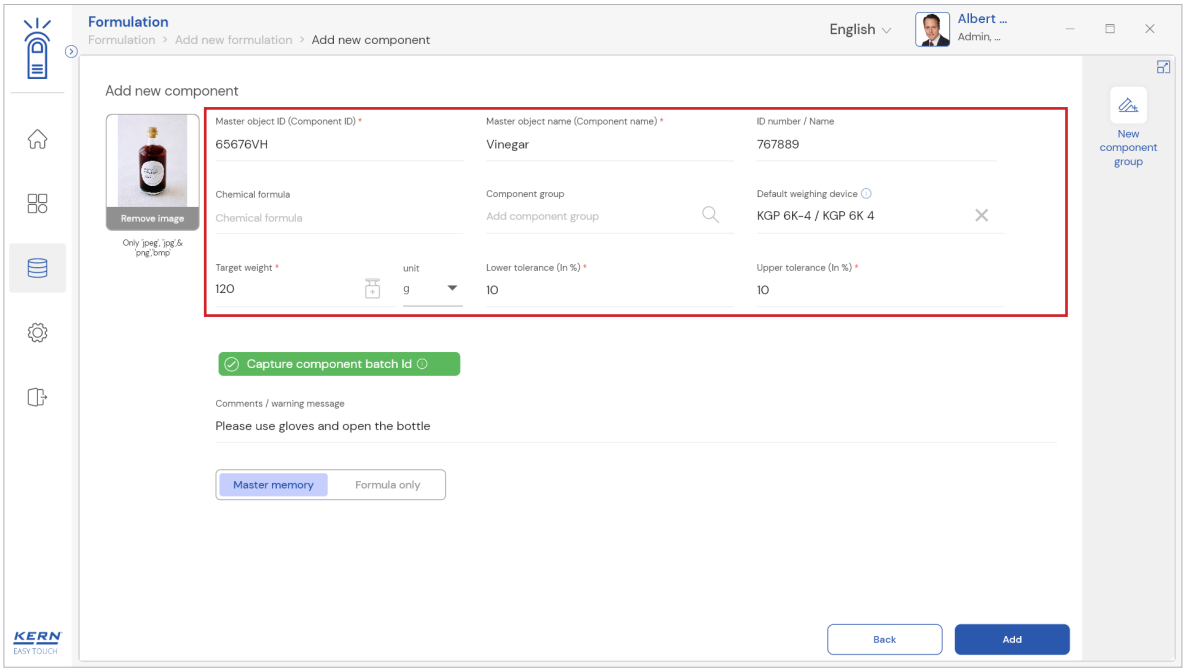
Activate auto tare: Enabling this option would automatically tare the weight of the previous component when proceeding to add the next component

- The user might be able to add the required components to prepare the formula or recipe after defining the mentioned options or fields above.
- Click on the hyperlink “click here to add a new component” or the button “add new component”.

2.1 Creating a new component

Add new component screen will appear where the user can enter the below properties which are required for the component





Component Id: User can provide a unique component Id to the components for the internal reference and user might be able to search based on the defined Id.

Component name: User can enter the name of the component.

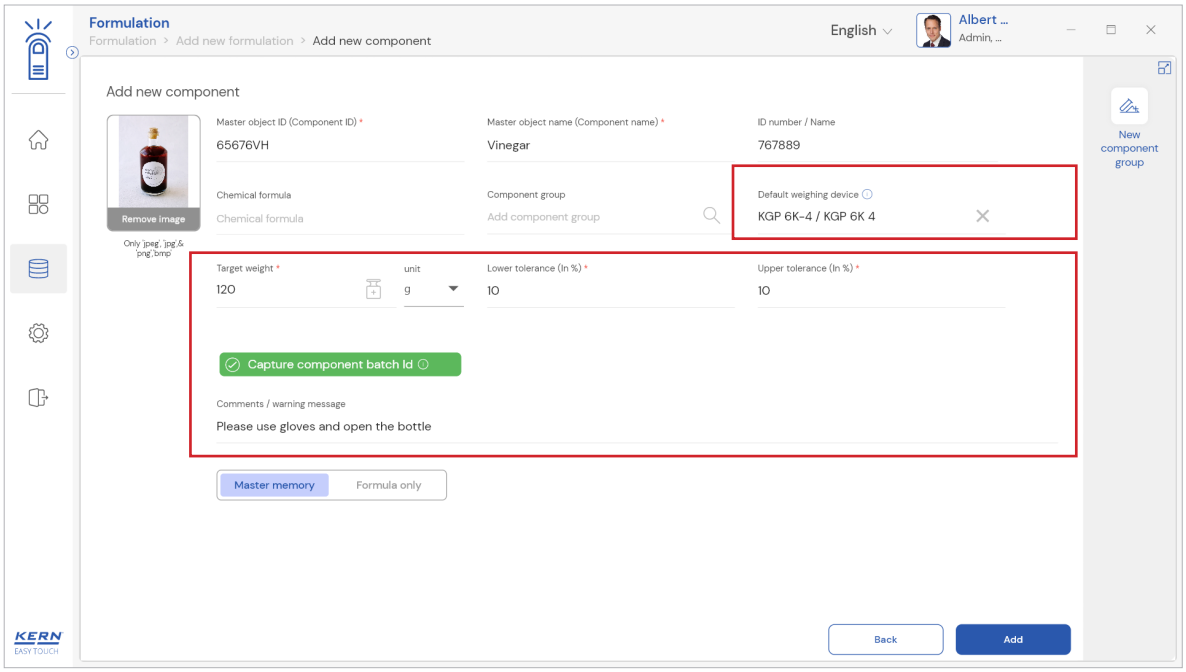
ID number / name: This is customized additional field maintained based on the industrial requirement where the users can provide an Id or name to the component and is not mandatory.

Chemical formula: The formula of the component what the user is going to add can be entered here. This field is completely useful in case of chemical, petroleum, cosmetics, pharmaceutical industries where the components are marked only with the chemical formula.

Component group: All the recipes created in the system can be grouped and segregated for the

reference and quick search

And the below options to activate or inactivate will be available to the user

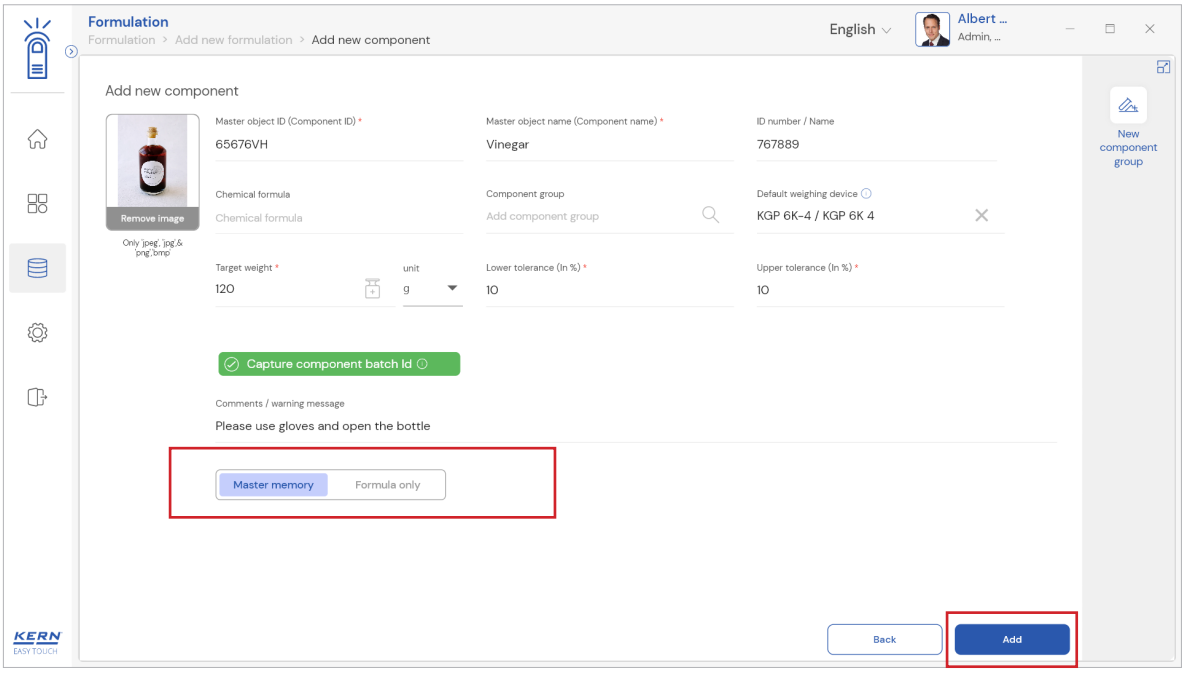


Default weighing machine: The list of devices created in the device management will be available here and the admin user can define a default device to the operating user so that the operating user might not face any such difficulties in connecting the device

Target weight, lower and upper tolerance: User can define the target weight of the component with the tolerance levels in percentage

Capture component batch Id: The batch id will be captured for each component after being measured while preparing the recipe

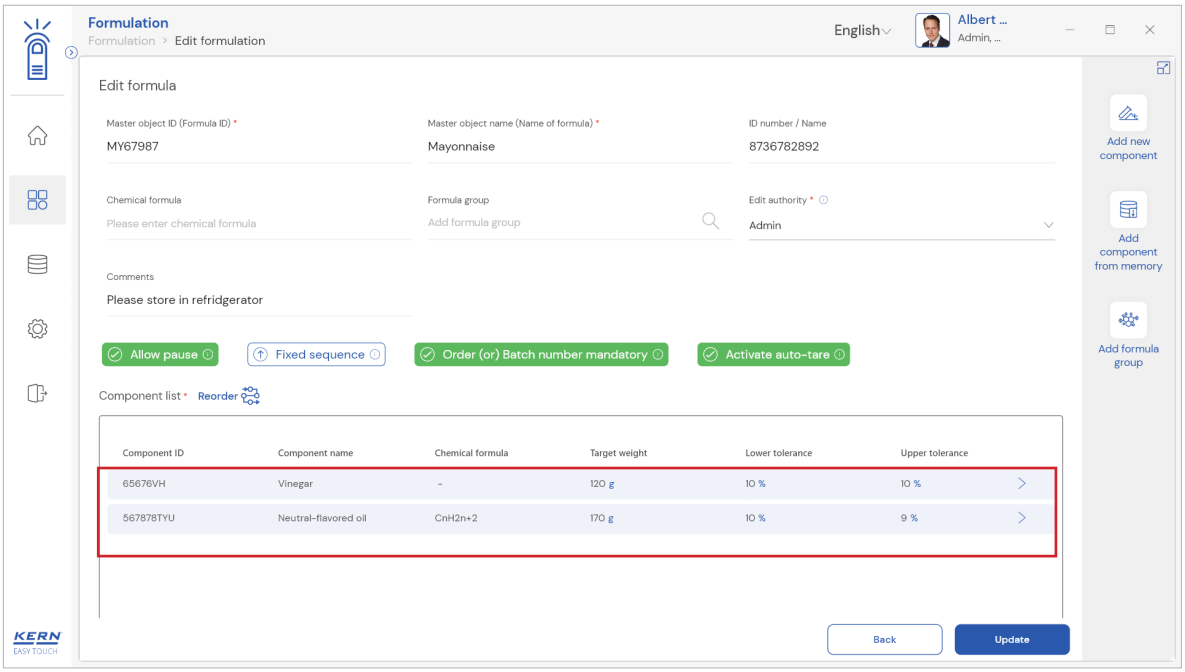
Comments: The comments shall be the set of instruction or rules to the performing user. The rules might occur before measuring the components



Master memory: Choosing the option “master memory” will save the component in master memory for reutilization. The purpose of the saving the component in master memory is to choose the components in memory wherever is required and to make it centralized.
For example, the component sugar might be used in the preparation of the coffee as well as for juices.

Formula only: Choosing the option “formula only” will save the component in formula only and not in the master memory. The purpose of the saving the component only in formula is to restrict the usage of the component in preparation of other recipes as this particular component might be available in little quantity or highly expensive.

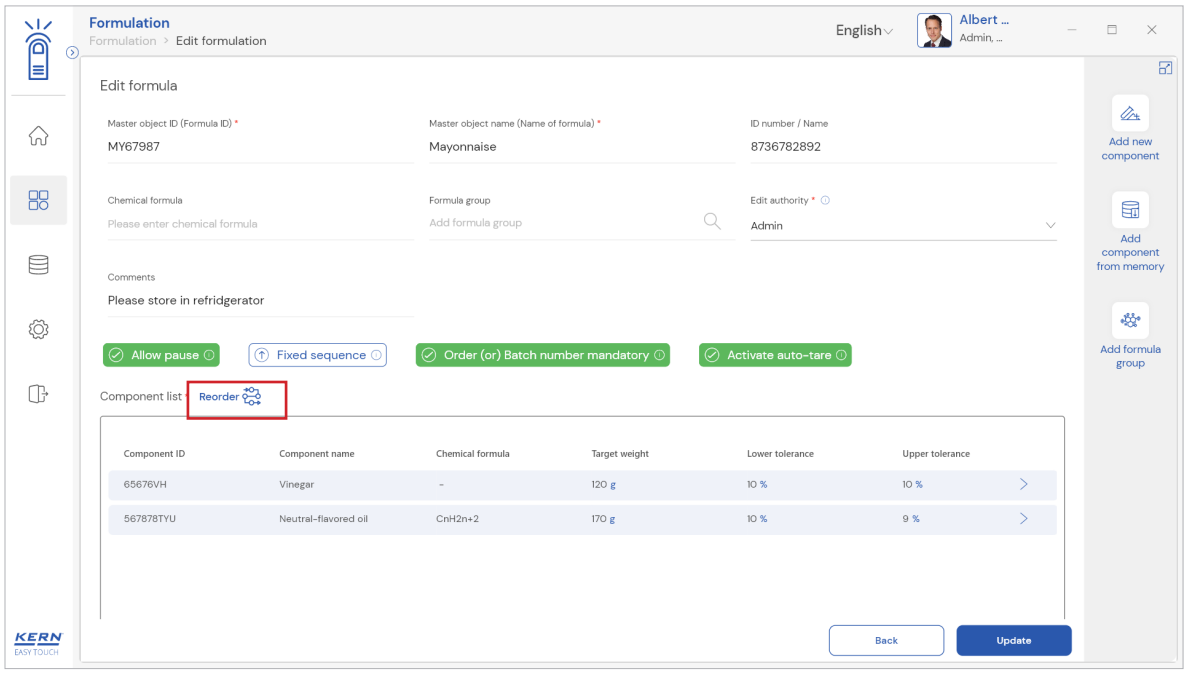
- Clicking on “add” will add the component to the list and now it can be saved.



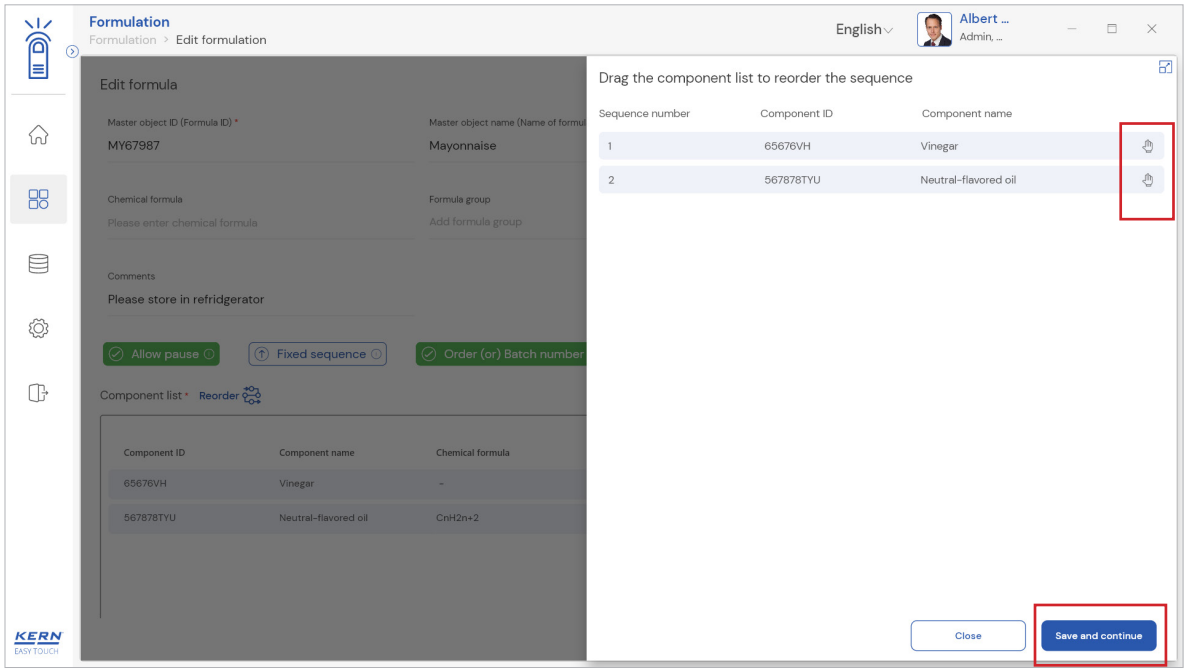
- User shall be allowed to edit, delete, and resave the components by clicking on the edit and delete options after selecting the required component.

Reorder:

- User might be able to reorder the list of components. Upon clicking the “reorder” button, user will be taken to a screen where the reordering of components takes place.



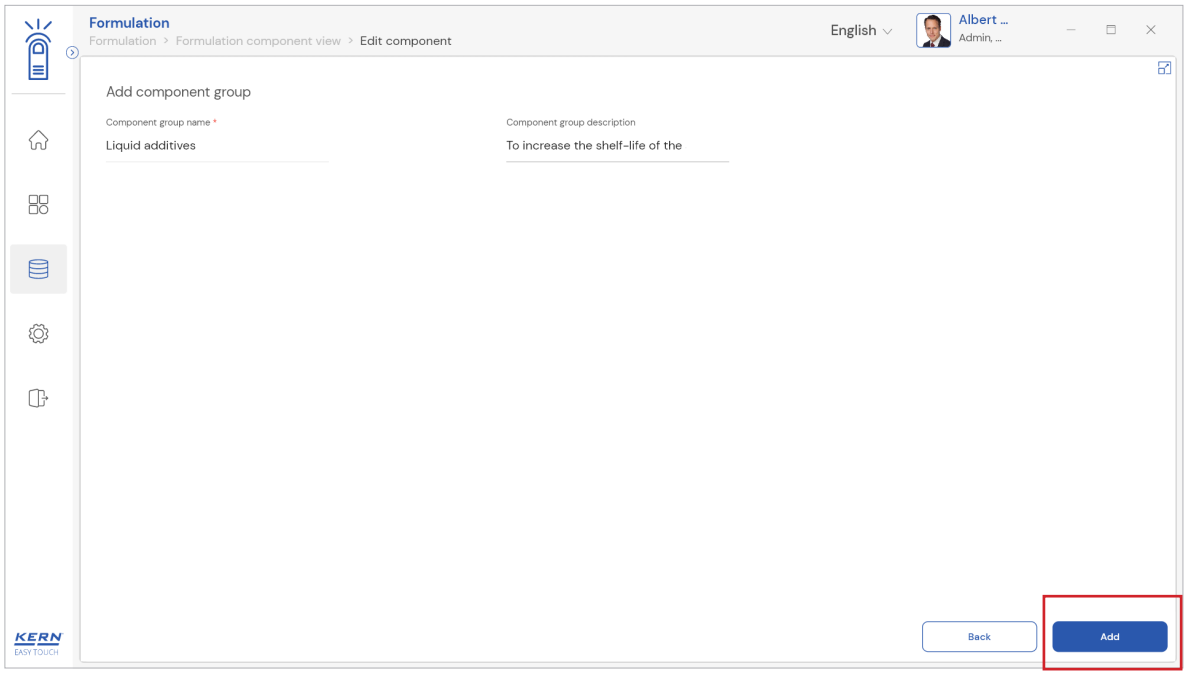
- Drag and drop to reorder the components



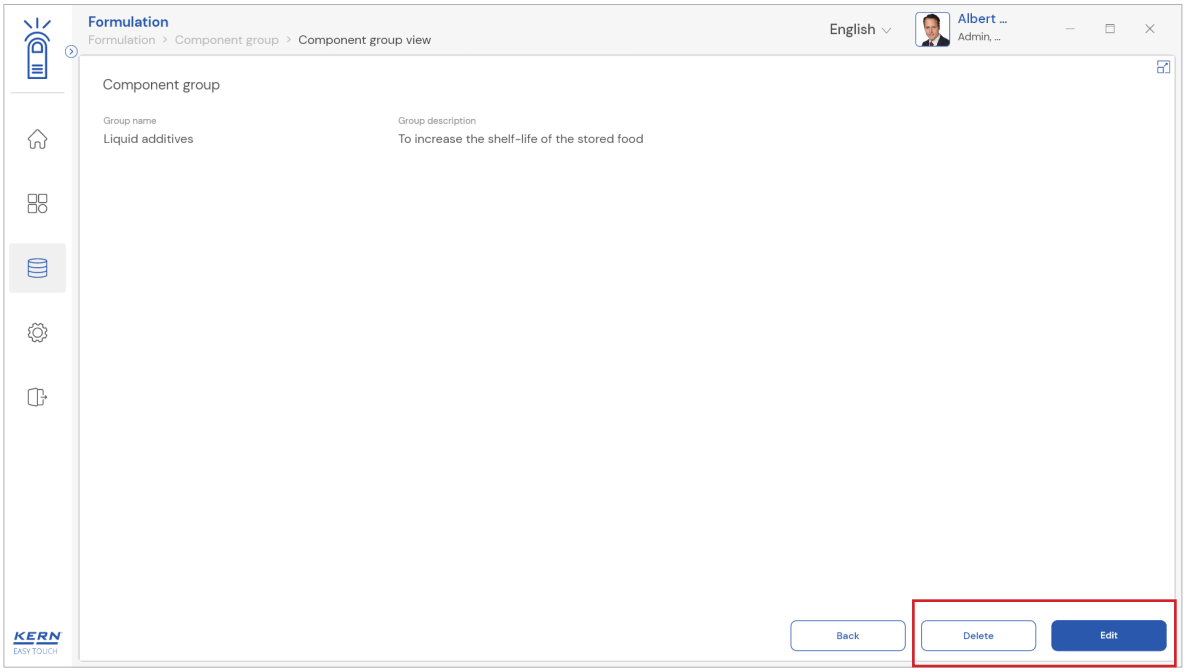
- Reorder and click on “save and continue” to reflect in the list.

2.1.1. Creating a component group

- Click on the “add new component group” and define the group. The created groups would be available while creating the component. User can allocate the component group to the set of components matching the respective group.

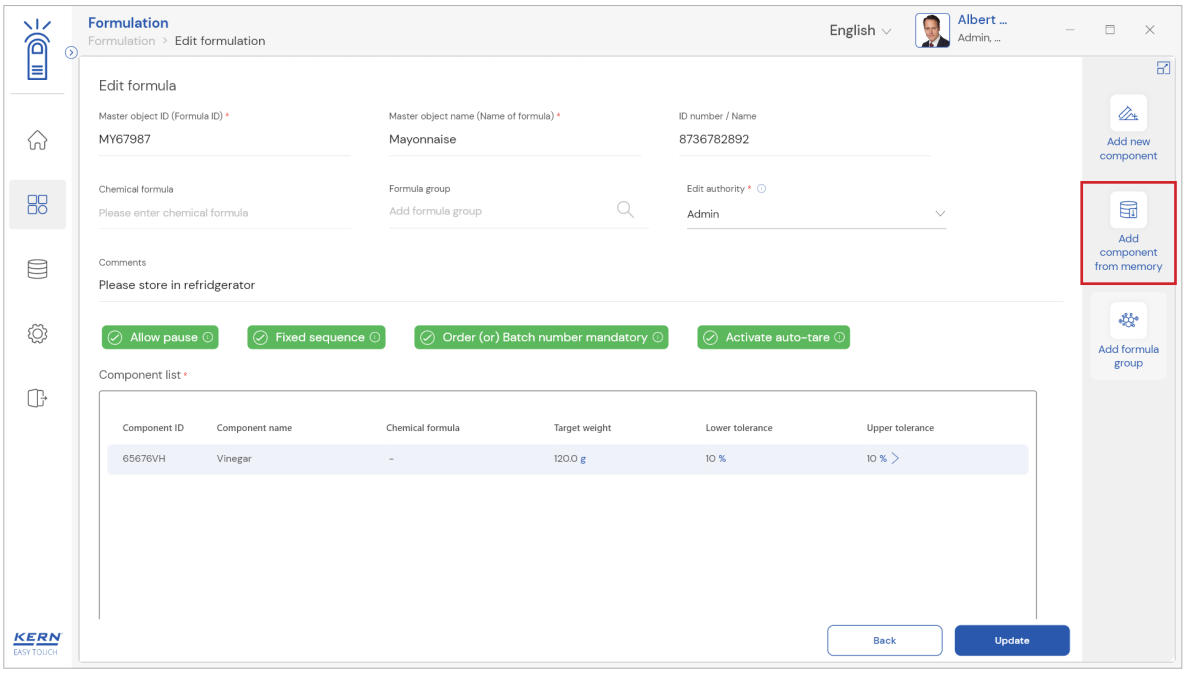


- Component group name and description: User can enter the group name and description
- Click on “add and save the component group”.
- User shall be allowed to edit, delete and resave the component groups by clicking on the edit and delete options after selecting the required component groups.



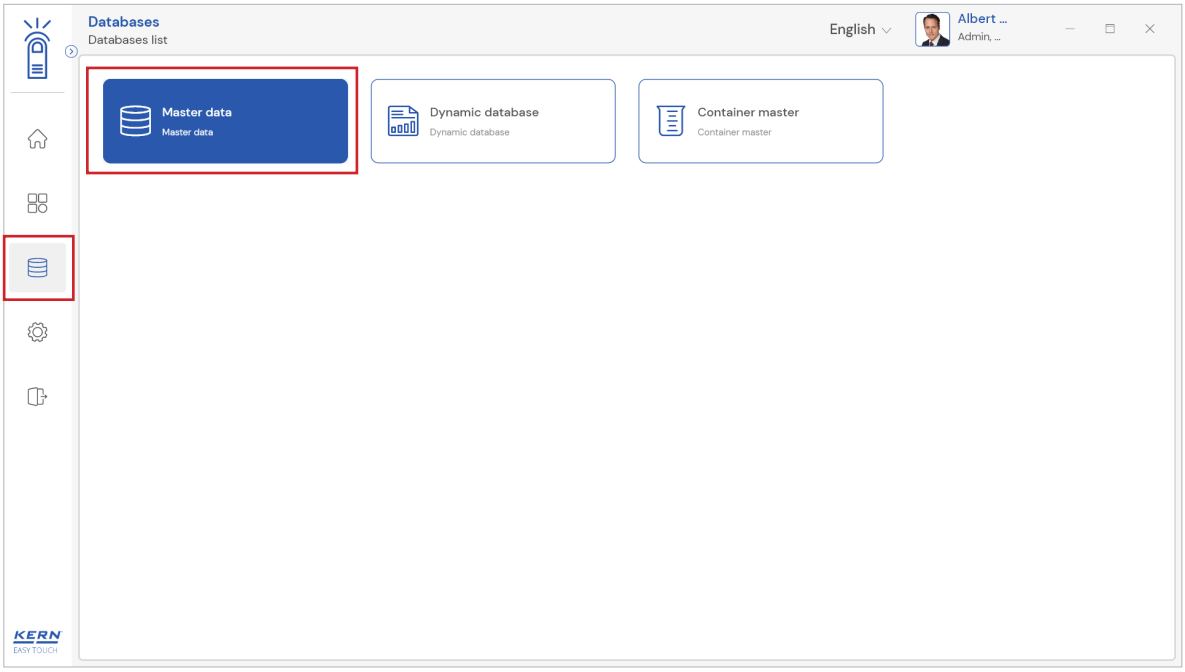
2.2 Adding the component from memory

The user might be able to pick an object from the memory where the user can predefine list of objects what you use frequently. The object in the memory can be reutilized.
Creating a component in master memory

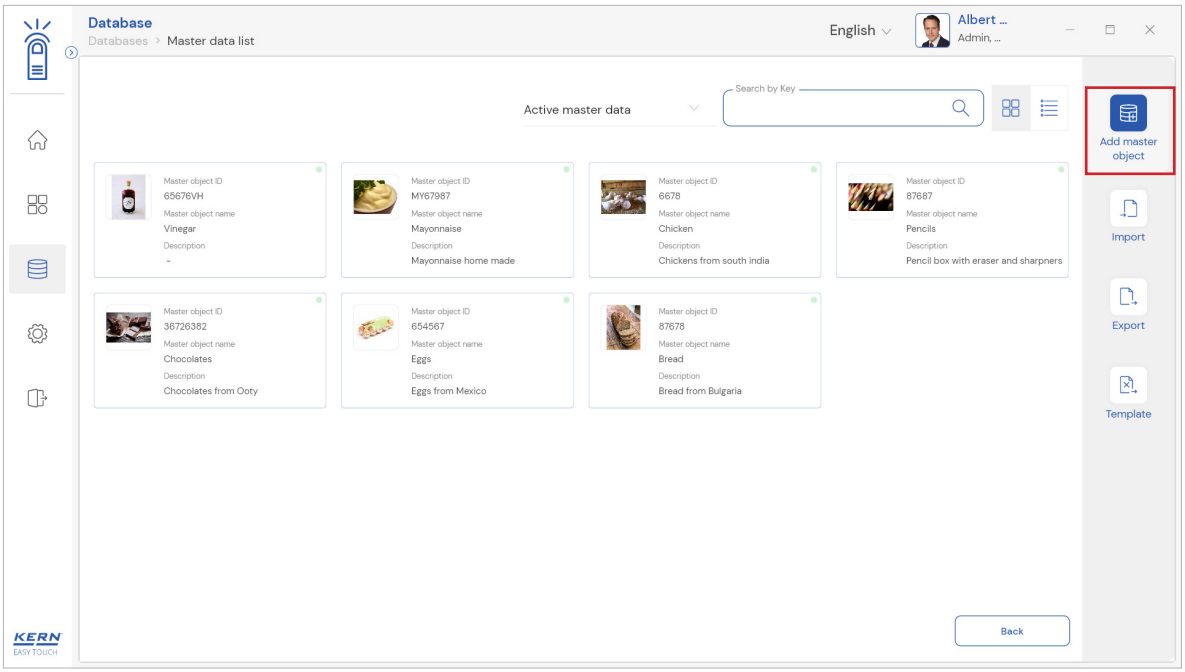


Steps to be followed to create a component with functional properties

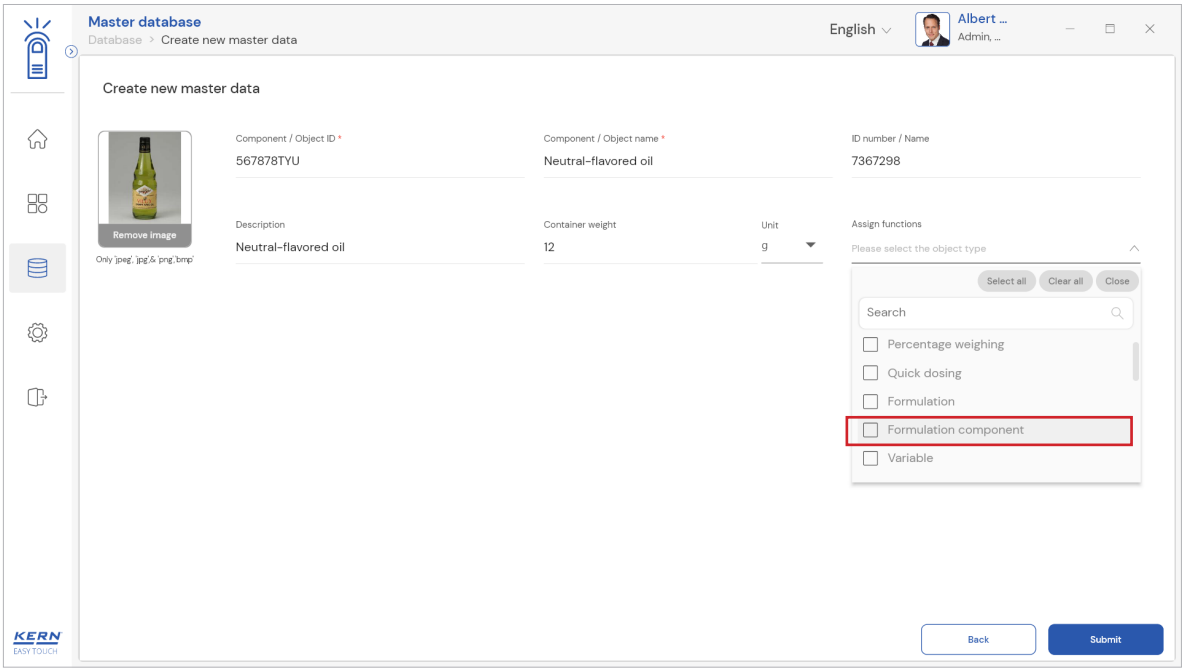
- Click the database icon from the main menu
- The database list will be displayed and click on the “master database” from the list.



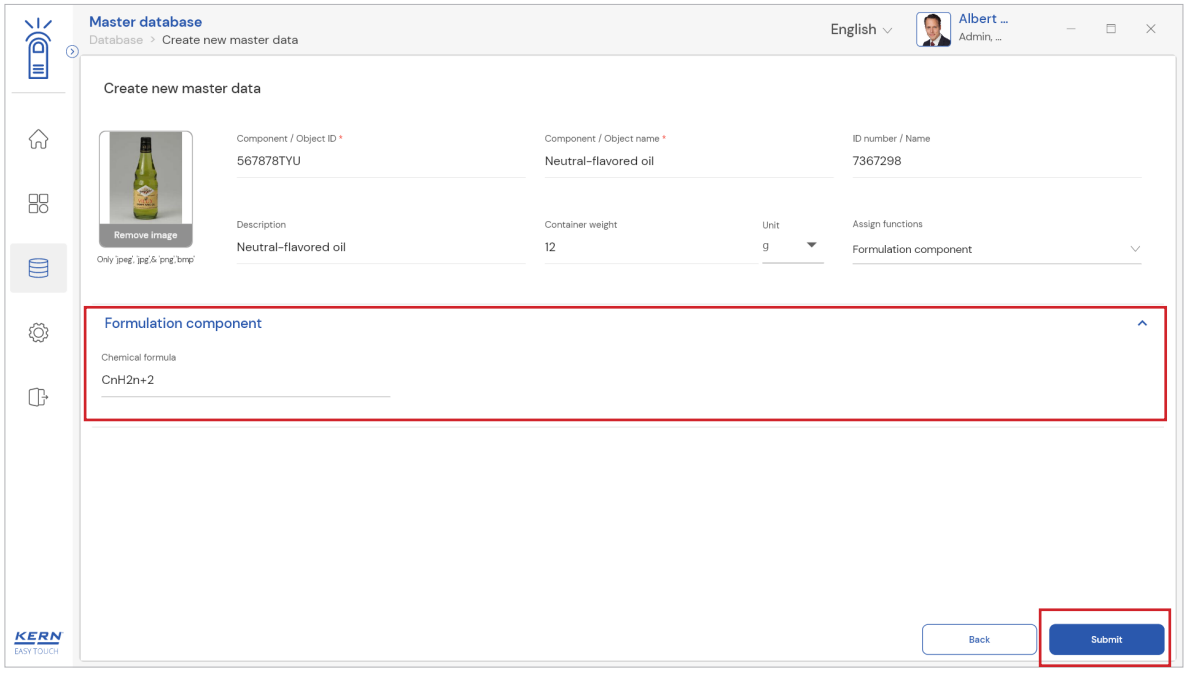
- The overview of the currently filed master data appears, by clicking on "add master object", the user can add a new master object with difference weighing and reuse it later in function if needed.

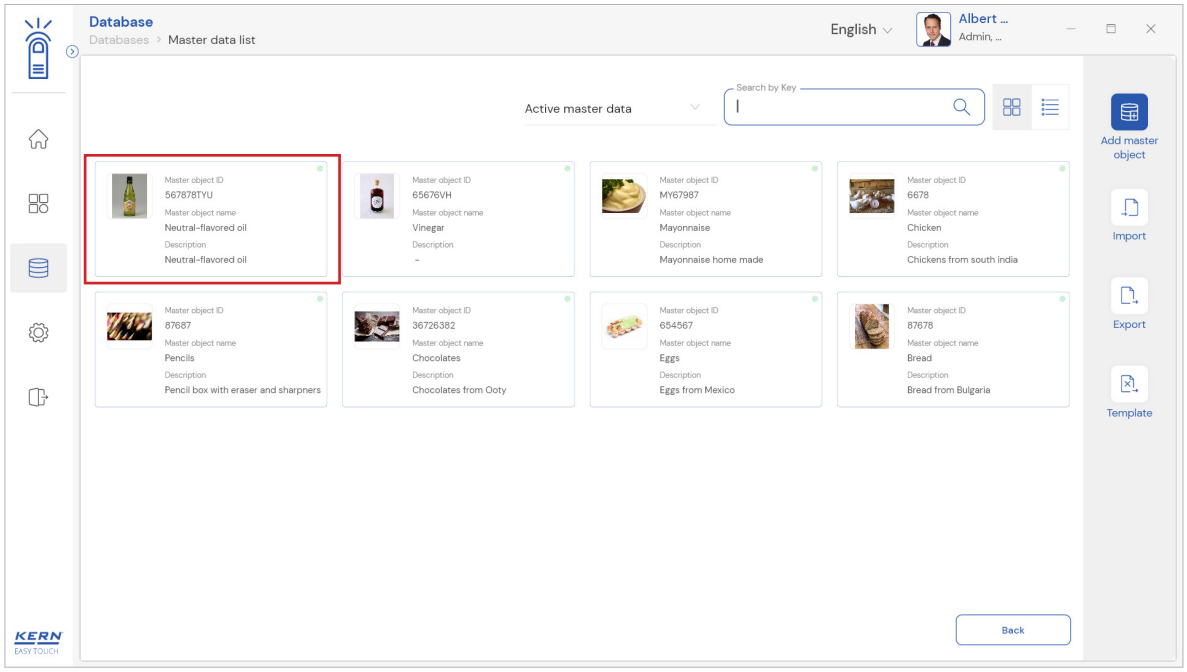


- The user can fill in the information as such component / object ID, component / object name, ID number / name, description, container weight and the image for the reference.
- When “formulation component” is selected from the drop down, the user can now enter the chemical formula.



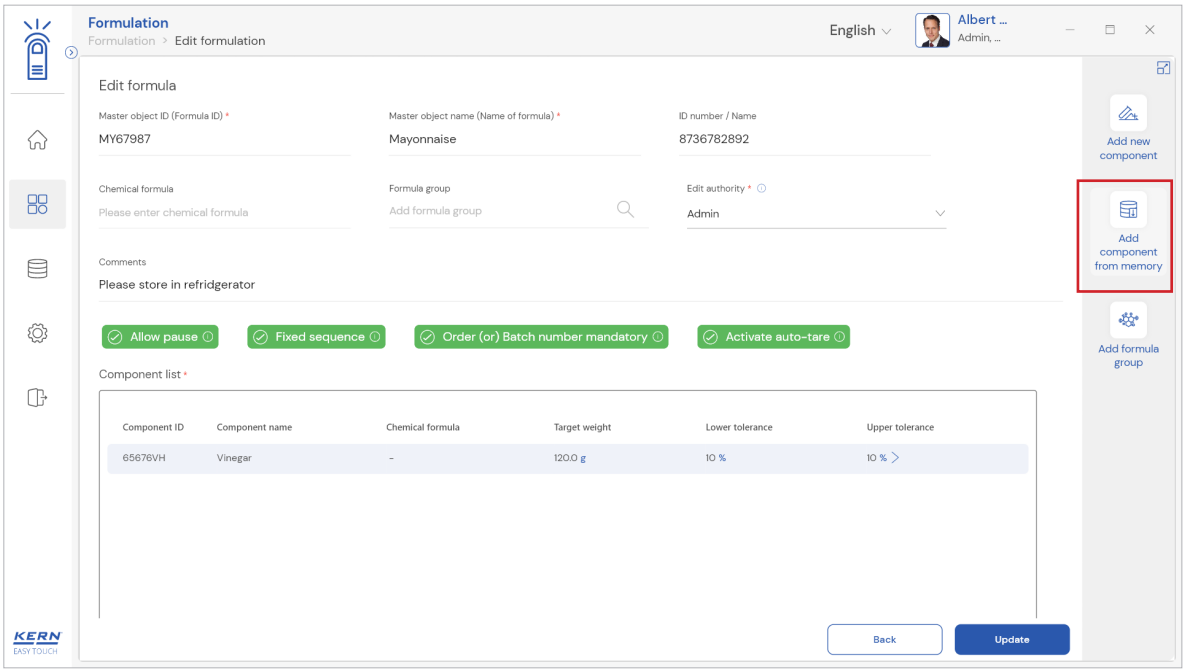
- Once the properties are assigned, user can click on submit and save the newly created master objects along with properties of formulation function and reuse it.
- Once the master object is saved you can view the master object in the master object list.

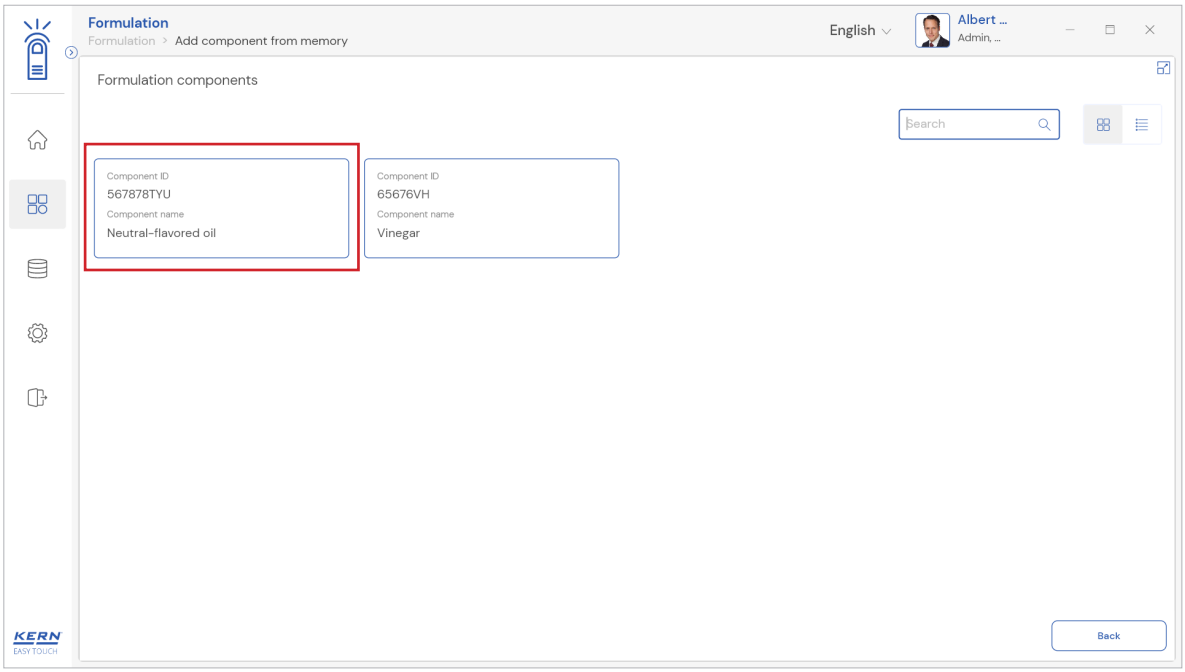




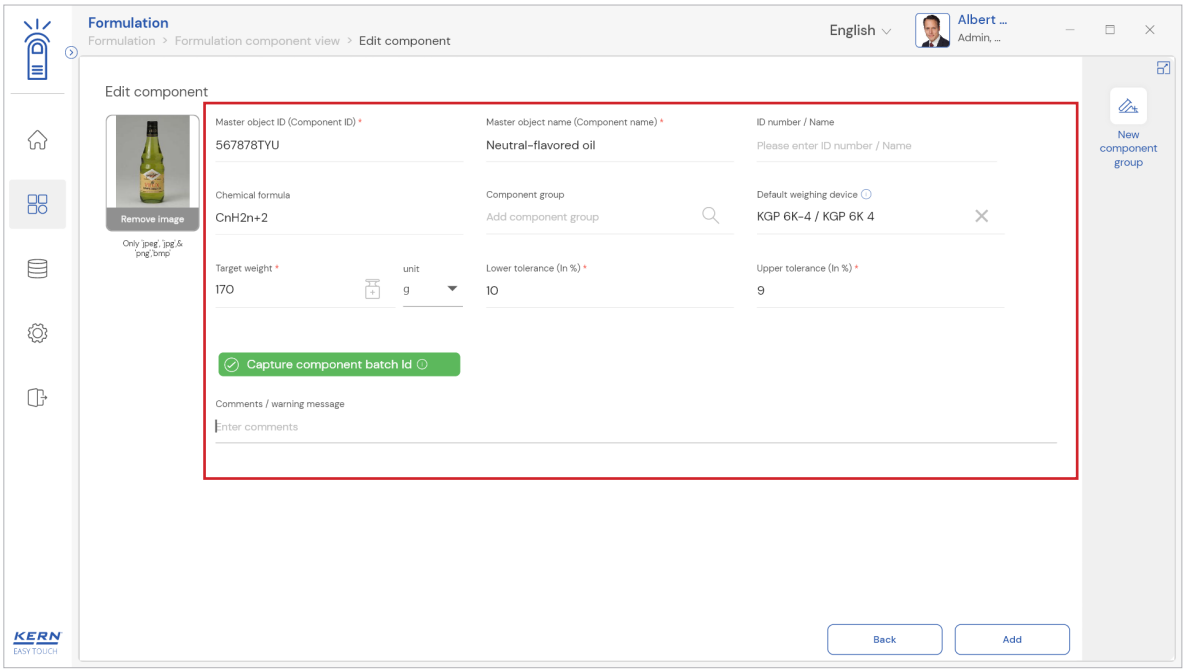
Utilize the master object in function

- Navigate to the formulation function
- Click on the formula and choose to add a new component from memory and the user will be taken to the master memory to pick from the list of objects predefined. User can click on the required object to be added.

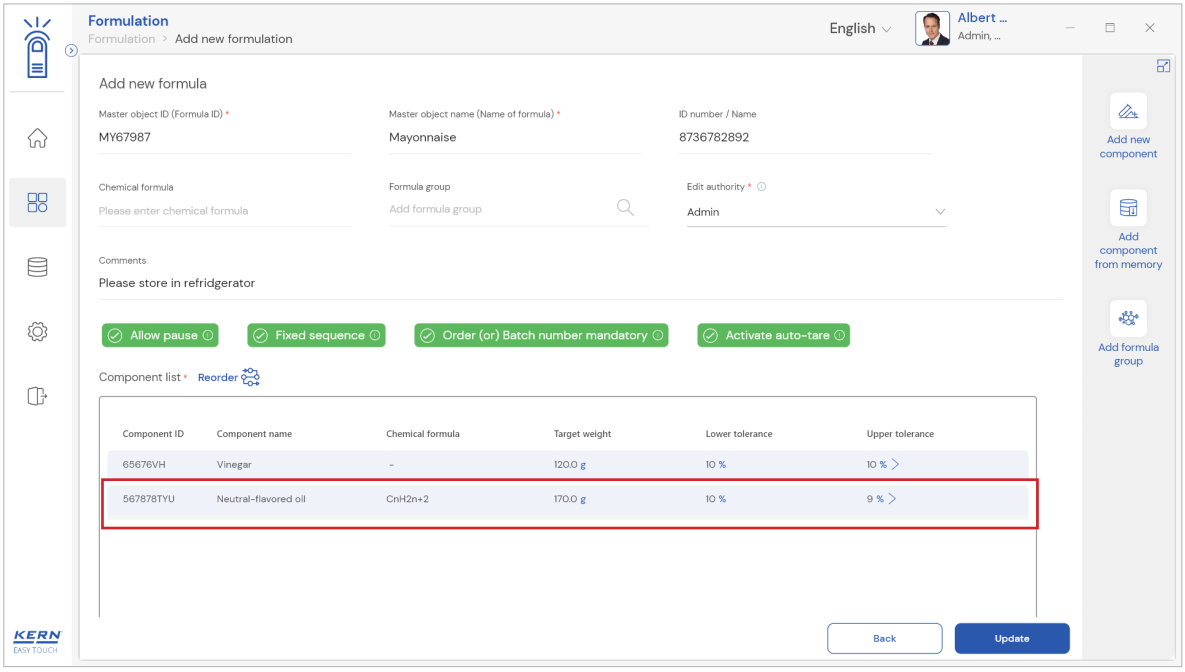




- User will be provided with the search option to search the required component or object.
- Now, the component will get added and the user could see as such the component Id, name, Id number / name, chemical formula is being auto populated and user will be able to fill the other required information and click on add to add the component to the list.

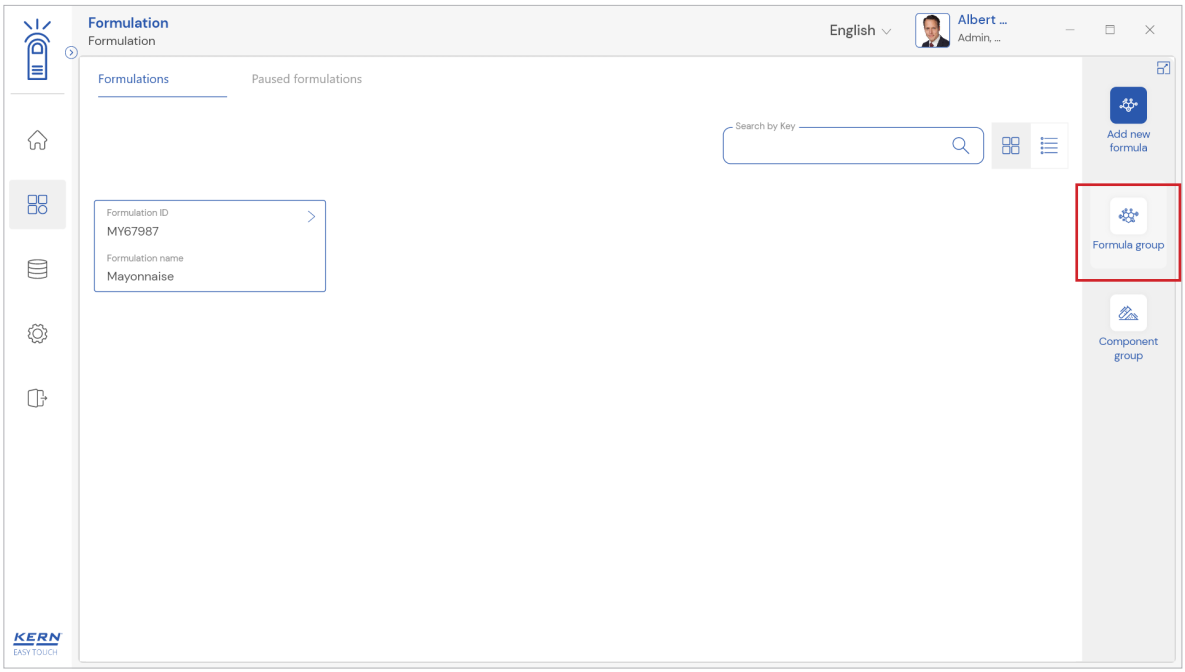


- The component will get added successfully to the list

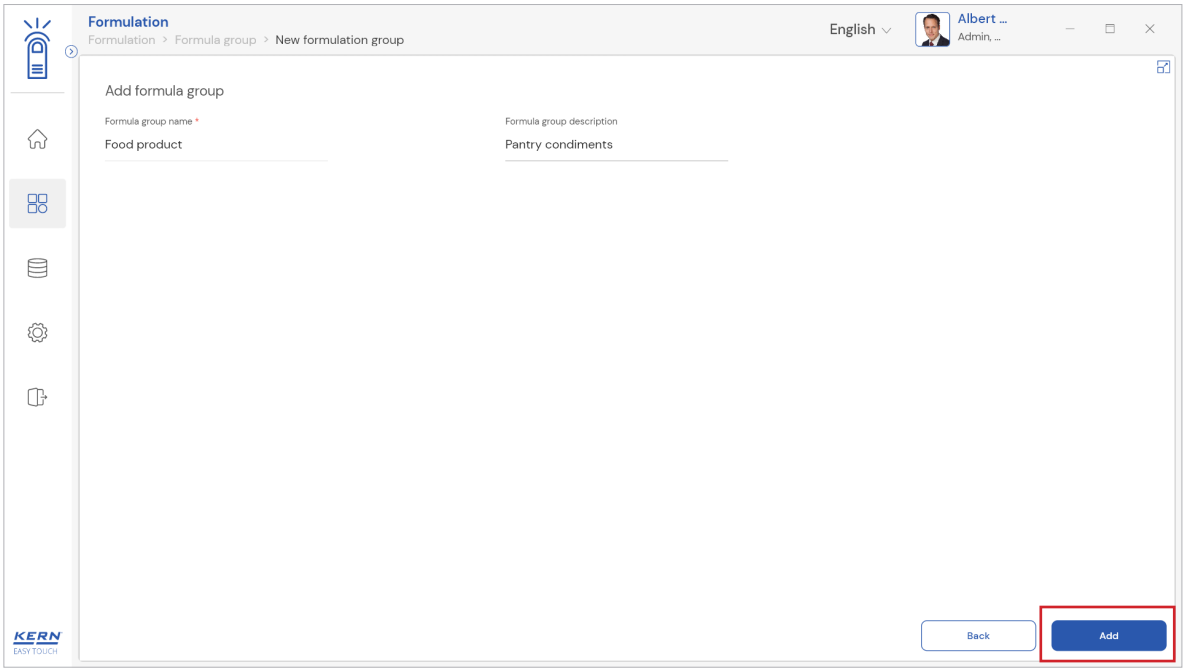


2.3 Creating the formula group

- Click on the “add formula group” and define the group. The created groups would be available while creating the formula. User can allocate the formula group to the set of formulae matching the respective group.



- Formula group name and description: User can enter the group name and description
- Click on “add and save the formula group”.
- User shall be allowed to edit, delete, and resave the formulae groups by clicking on the edit and delete options after selecting the required formulae groups.



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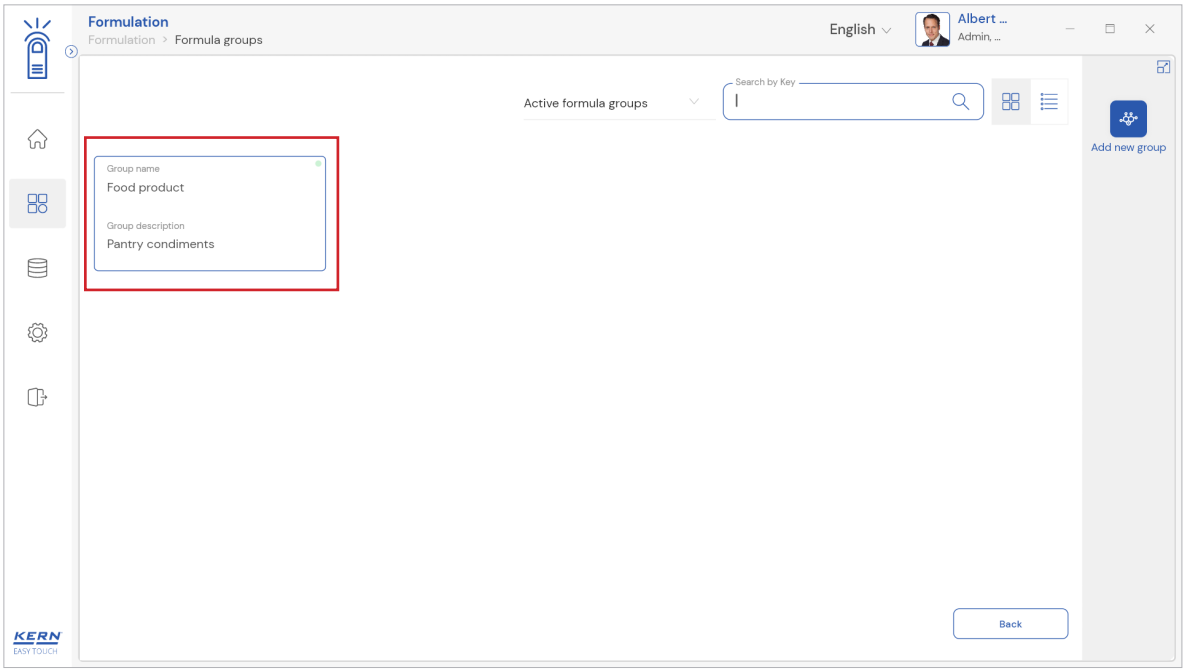
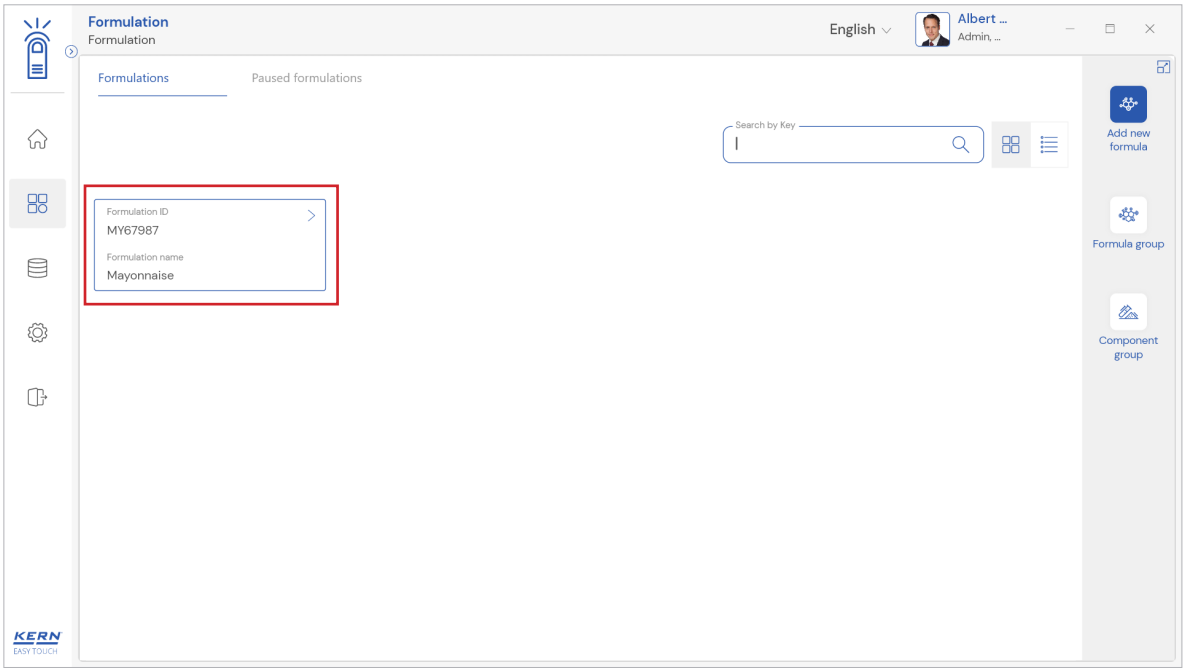
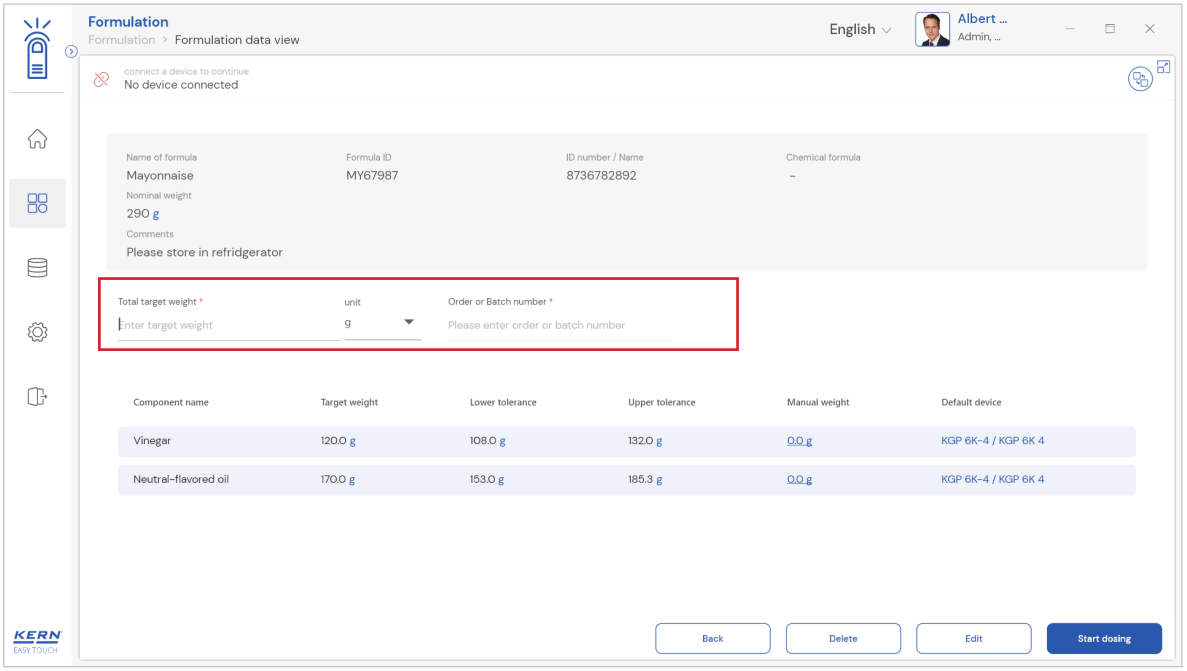


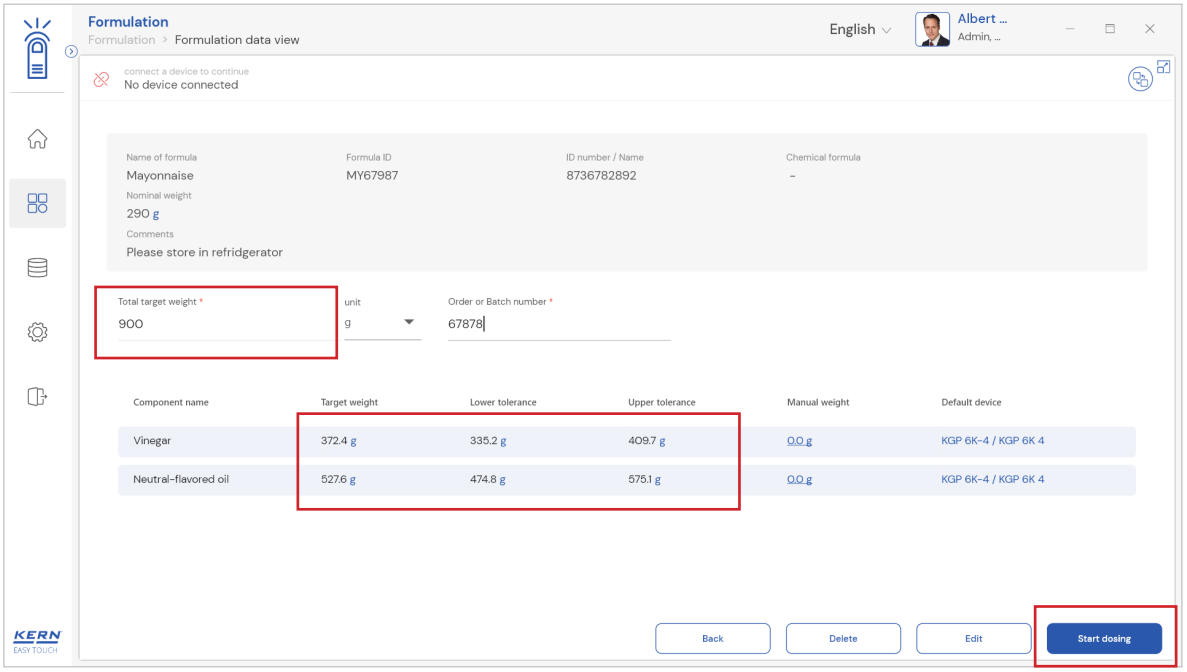
3.0 Selecting a formula

- The formula created either from memory or using the formulation function will be listed here and the user might be able to choose the respective formula for preparation of the recipe

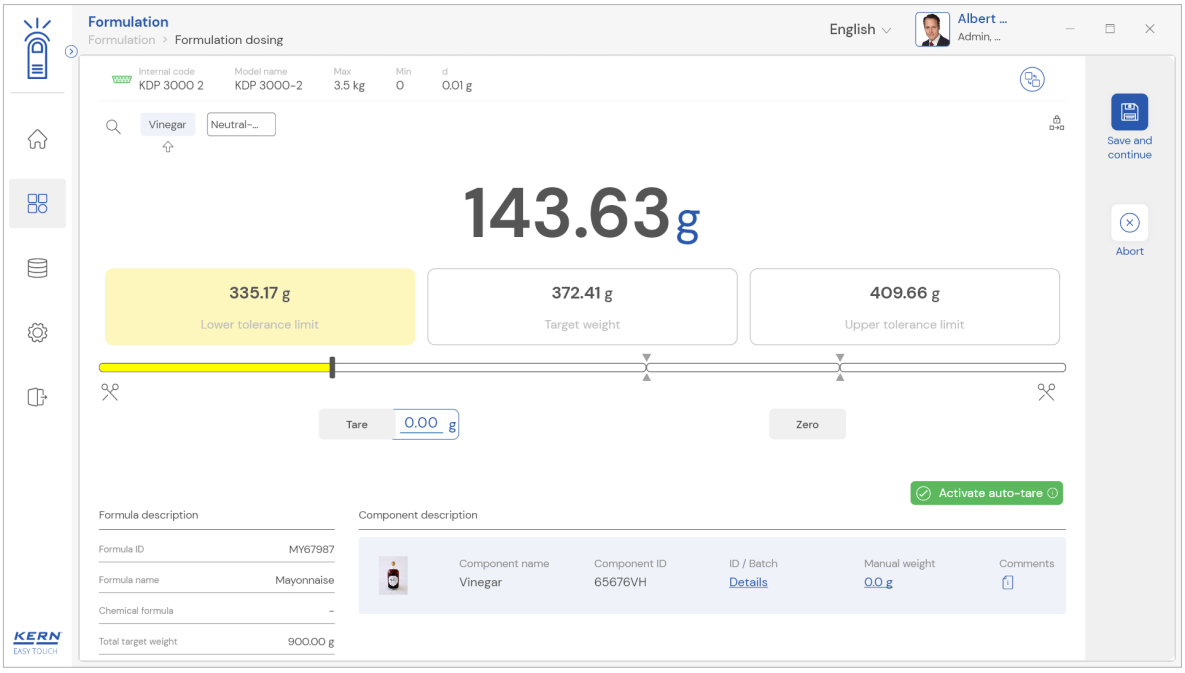


- The below screen would be displayed detailing with the individual target weight.
- The user can define the target weight of the recipe to produce the product.
- The individual target weights of the component will change according to the entered product target weight





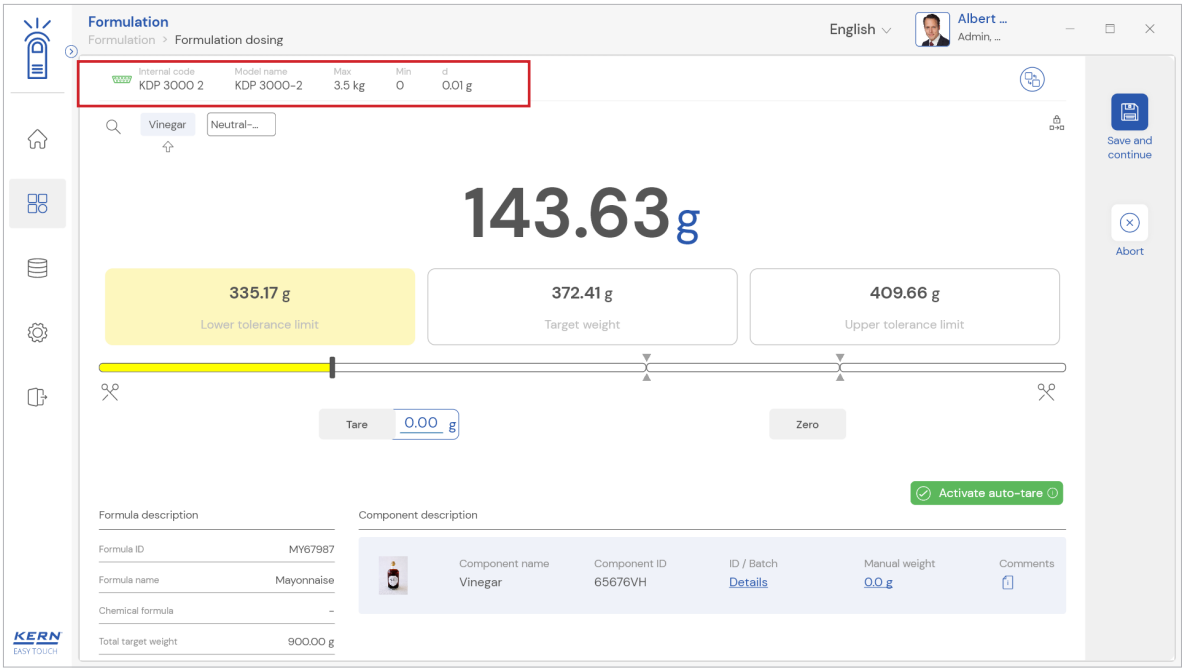
- User can start dosing the components by clicking on the dosing button.



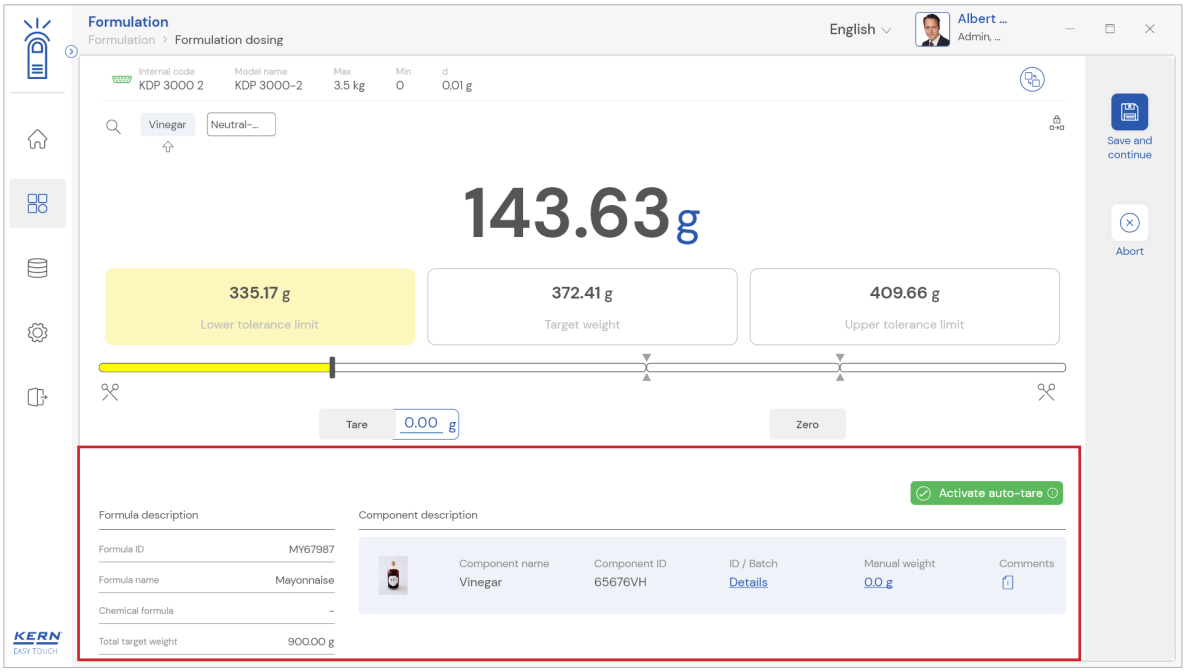
4.0 Formulation / dosing

Connecting a weighing scale

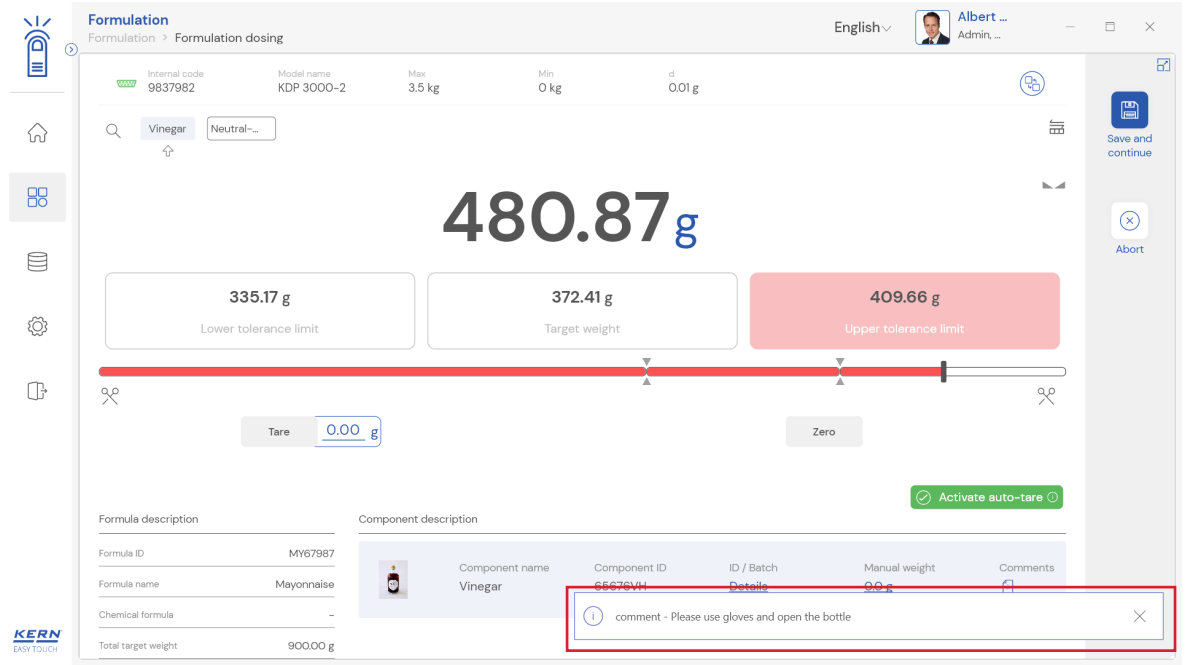
Please connect the active weighing scale to the system to start measuring the substance. Please refer the “device management” user manual to help with the device connection instructions.



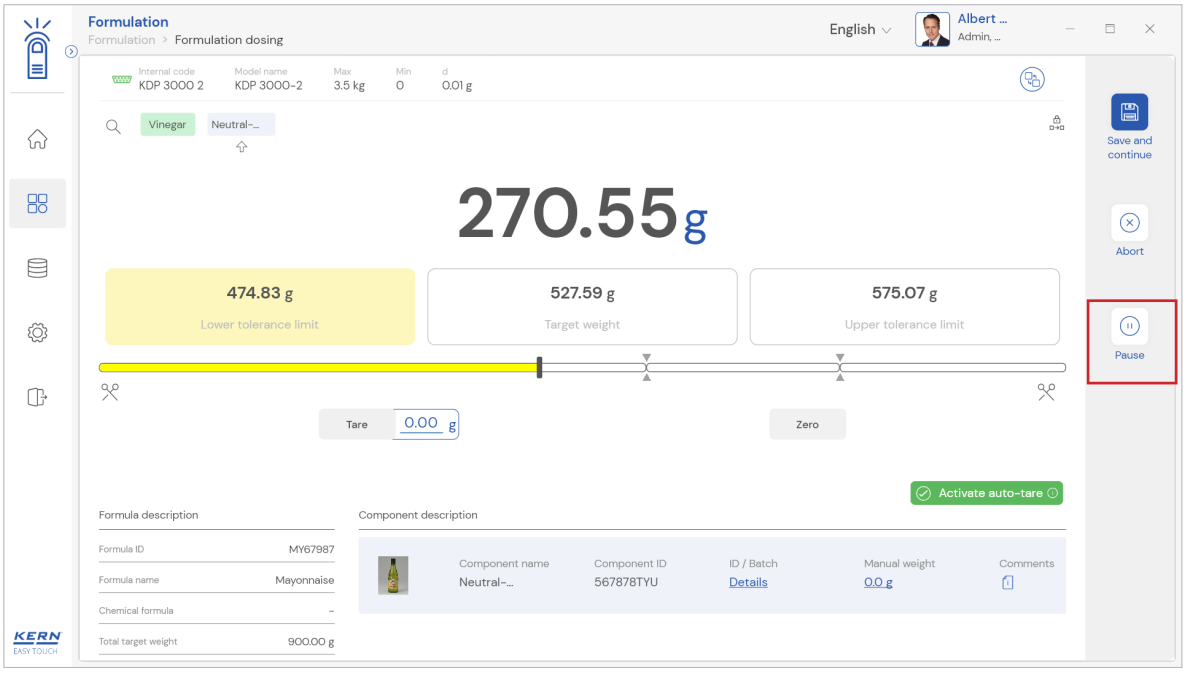
- The first component of the recipe would be displayed with the calculated target weight and the tolerance.
- User could see the relative details regarding the formula and the measuring component
- User could be able to see that the options defined in the formula or components will be reflected here.



Comments: User might be able to get the instructions defined against the component and can follow it while measuring and handling.

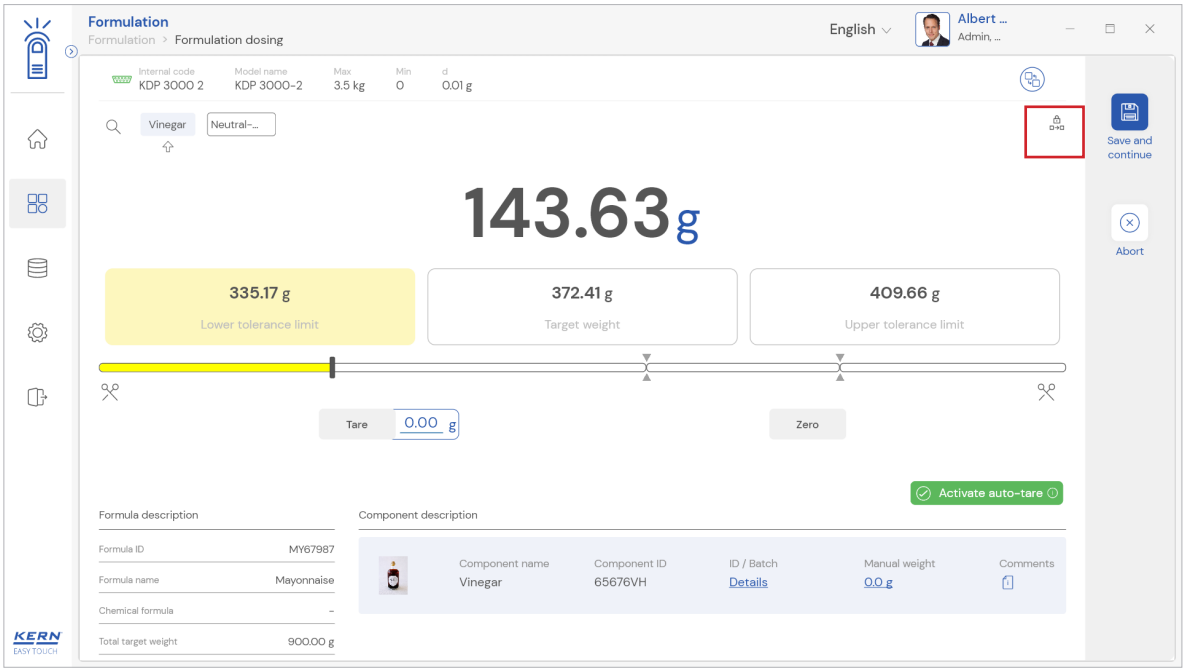


Allow pause: User might be able to pause the formulation whenever required during the preparation or dosing of components in case if the option is being enabled and will not be able to see the pause icon in case if it's disabled in the formula

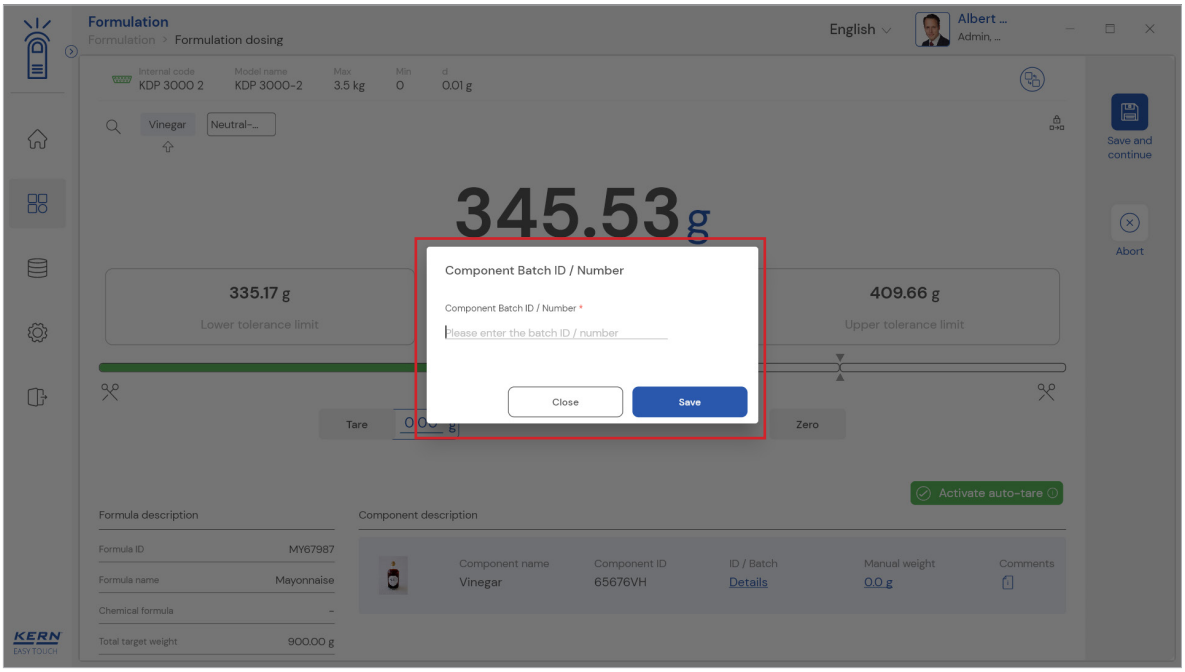


Paused formulae: The paused formulae might be found in the paused formula list in the home screen
Upon clicking the required formulae, the user might be redirected to the screen from where the user has left.

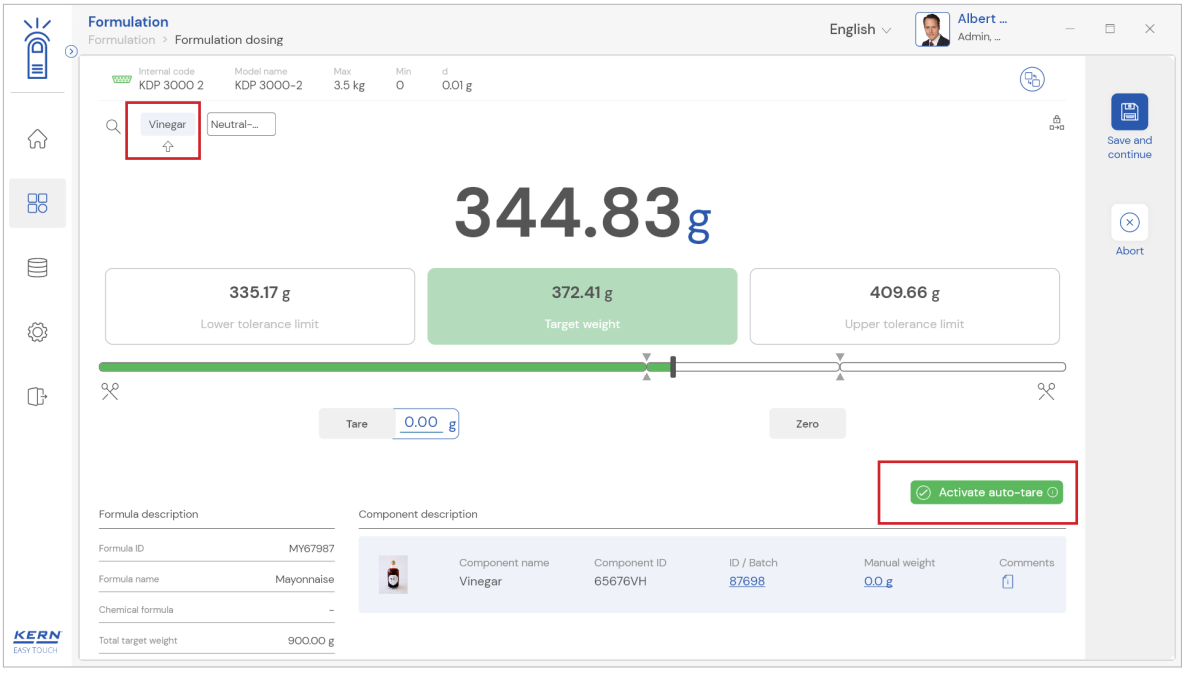
Fixed sequence: Enabling this option would allow the user to move from first to any of the components as per the operator's wish and user might not be allowed to switch the components in case if the option is being disabled

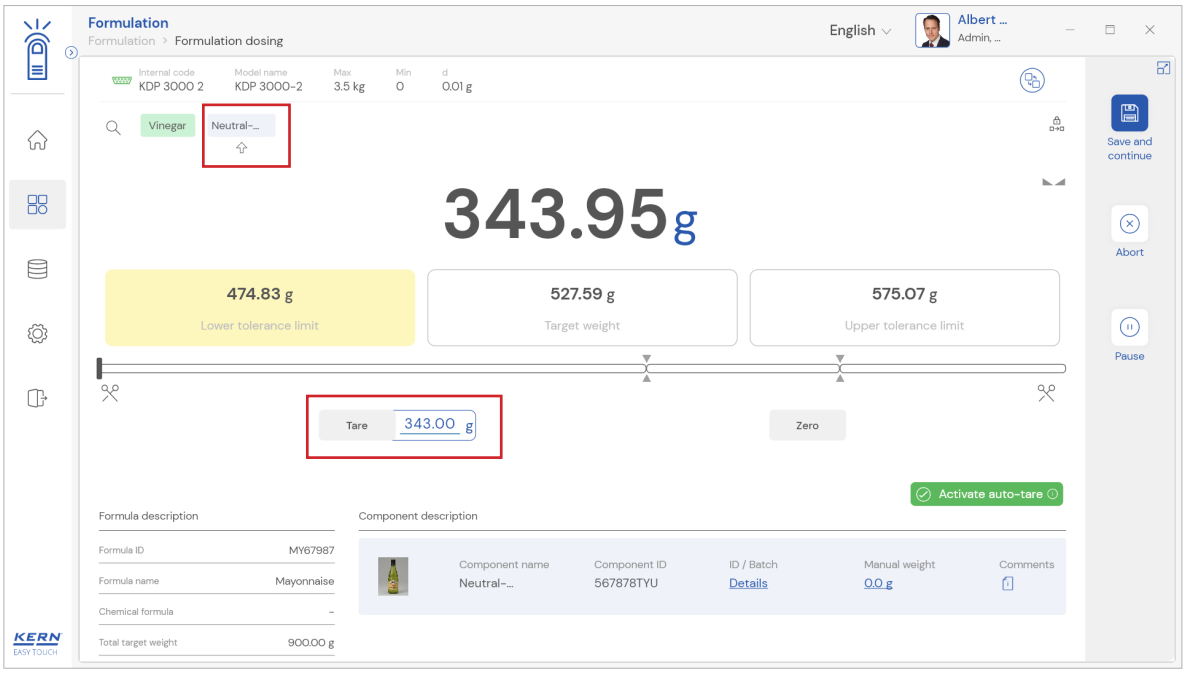


Order or batch number mandatory for component: Enabling this option would ask the user to enter the order or batch number mandatorily once the measurement is been done.



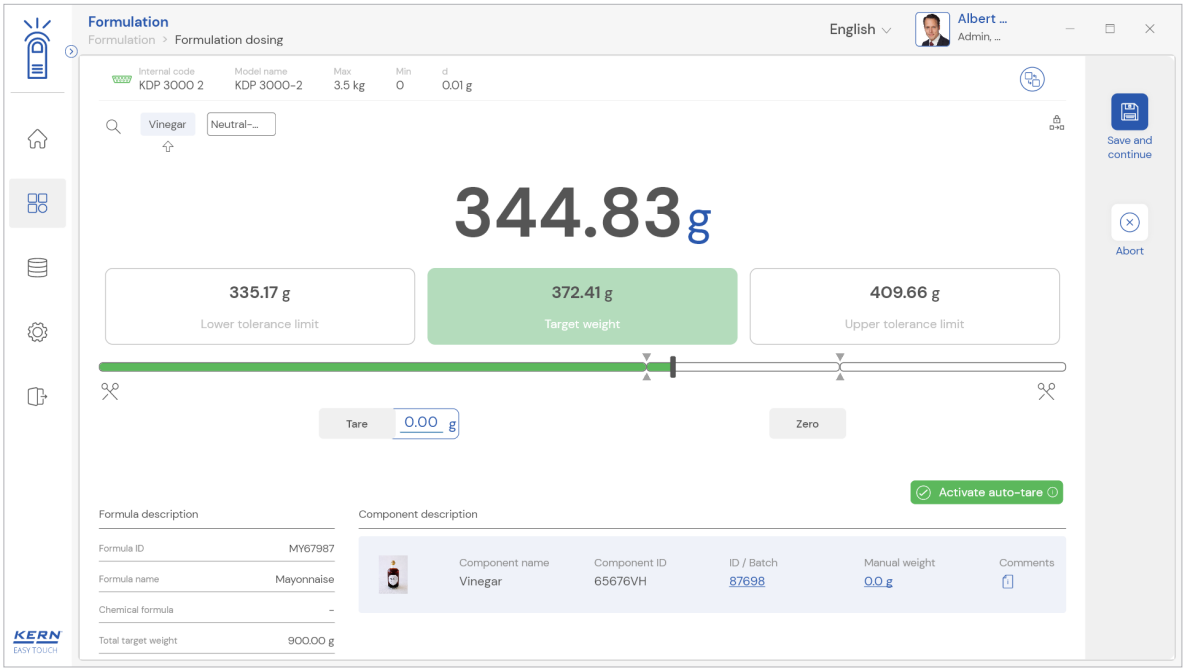
Activate auto tare: Enabling this option would automatically tare the weight of the first component when clicking on save and continue to proceed in measuring the second component



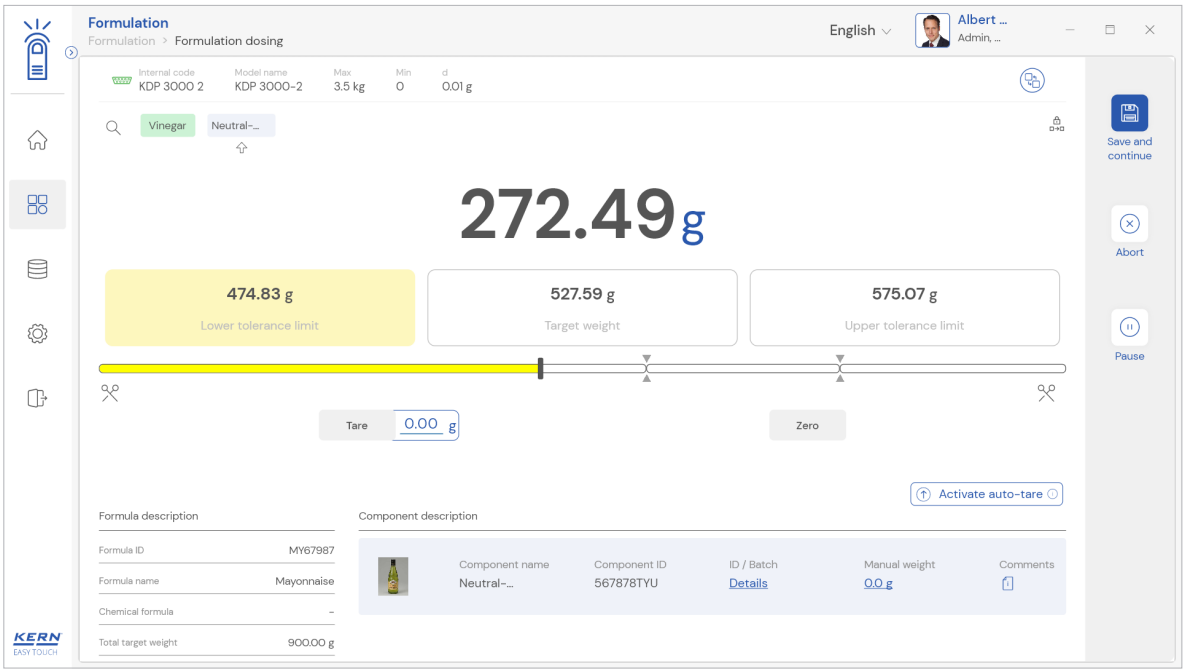


Place the component and observe the colour and sound indications

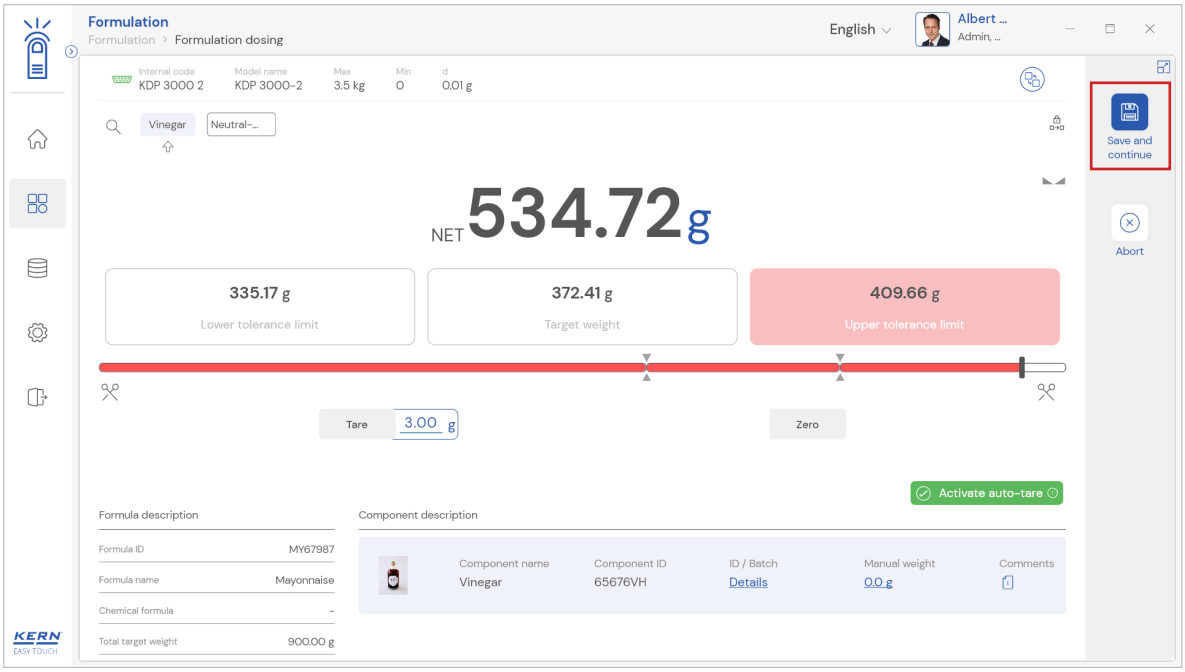
- The green colour indicates that the target is reached, and user might be able to proceed with the next component.



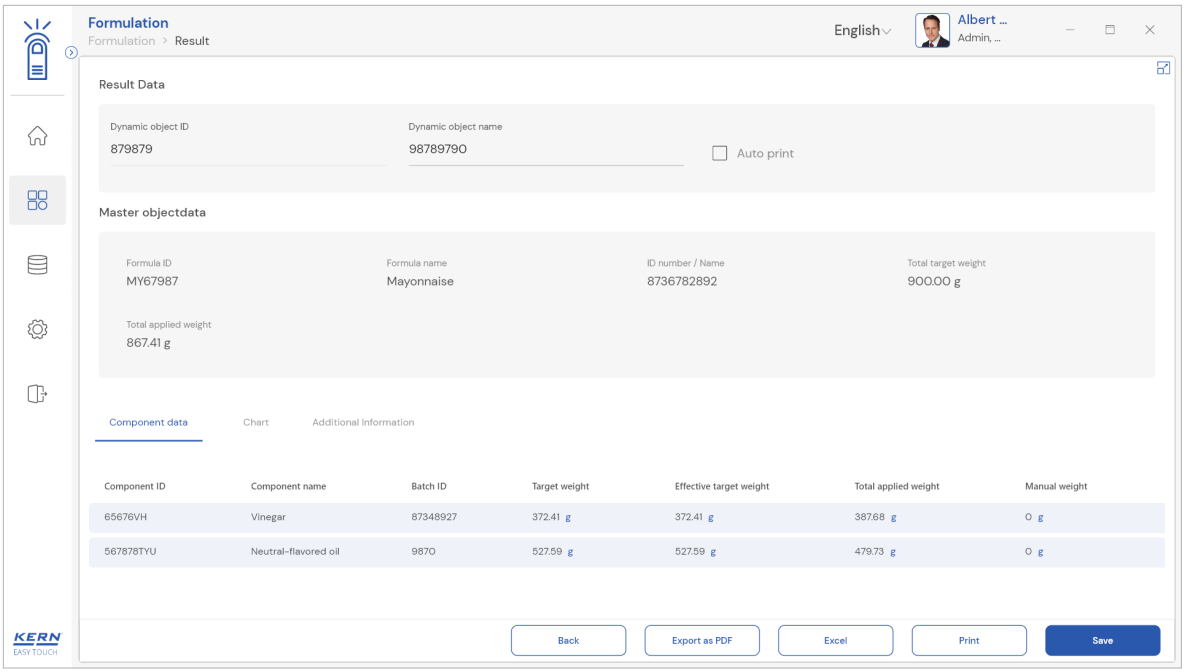
- The yellow colour indicates that the target is under the minimum tolerance, and user might not be able to proceed with the next component.



- The red colour indicates that the component is overdose and required to be corrected to proceed with the next component.

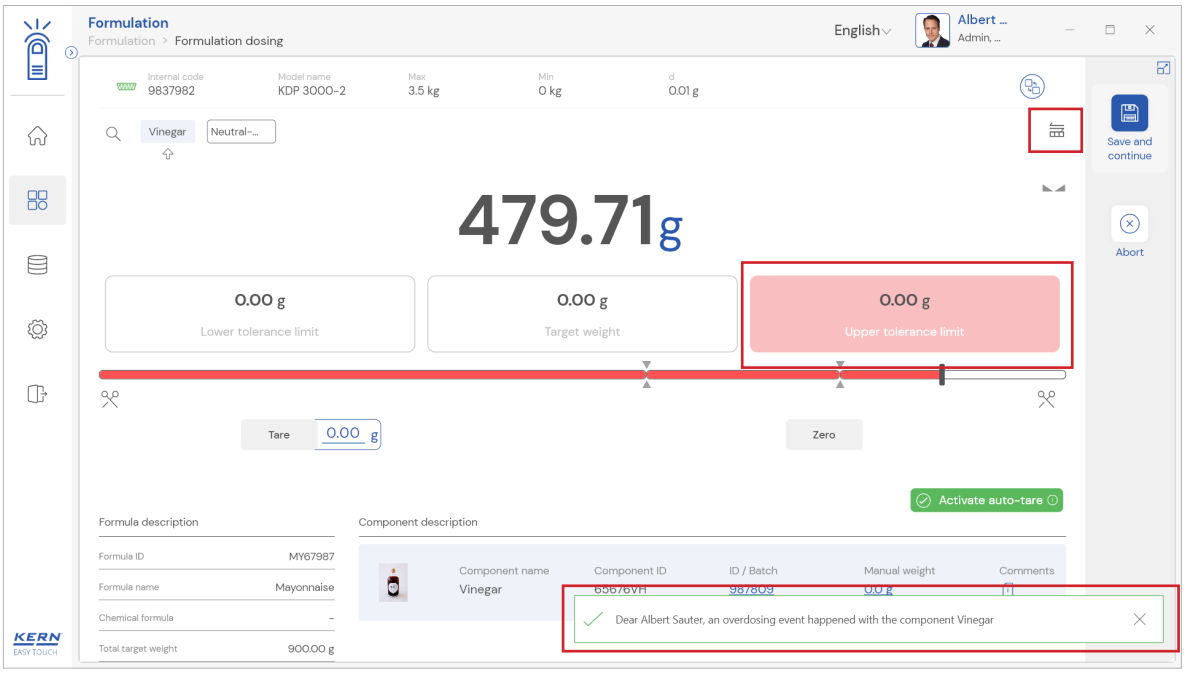


- Dose carefully the first component until an acoustic signal sounds and the field “target weight” in the center is displayed green.
- Click on save & continue and proceed in measuring the next component. Repeat the same steps and complete the recipe.

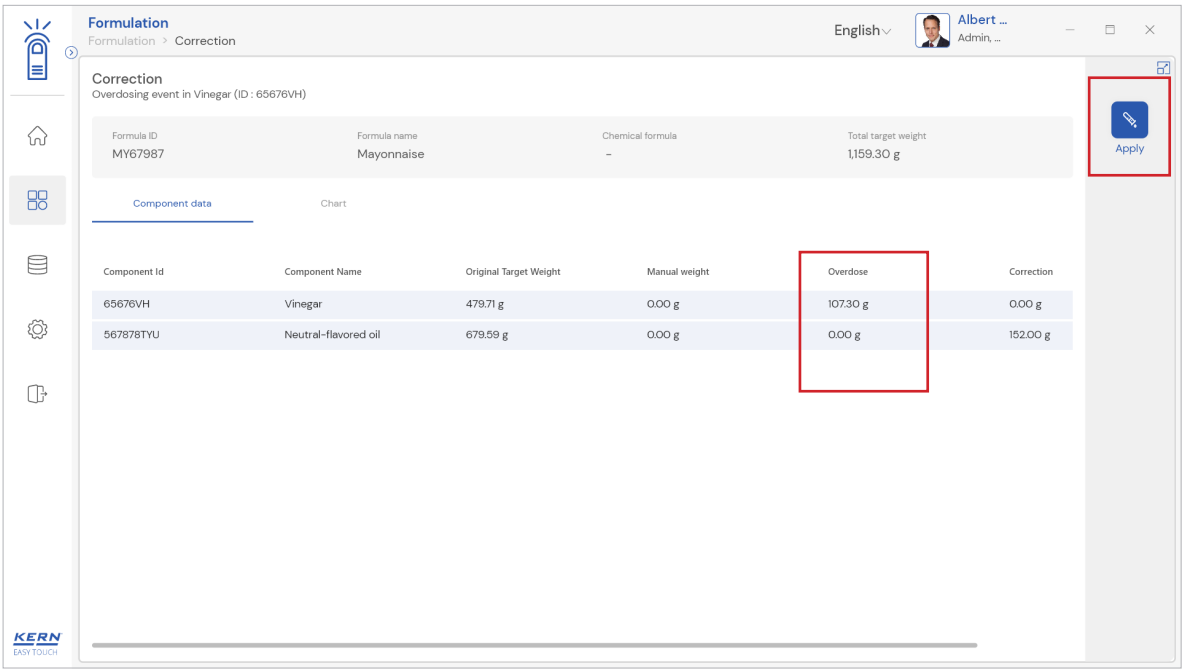


4.1 Overdose

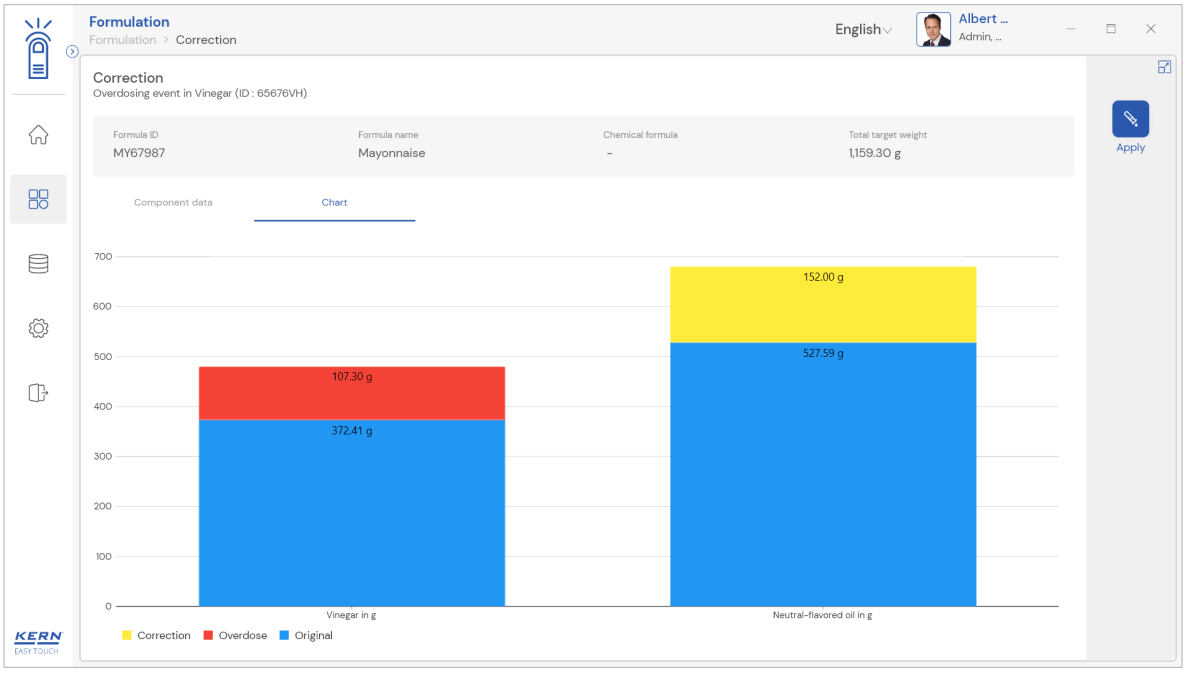
- Overdosing occurs when the component weight exceeds the upper tolerance. User might be able to proceed with weighing the next component only upon applying the correction.
- Correction means the target weight of the remaining components will be automatically recalculated based on the weight of the overdosed component



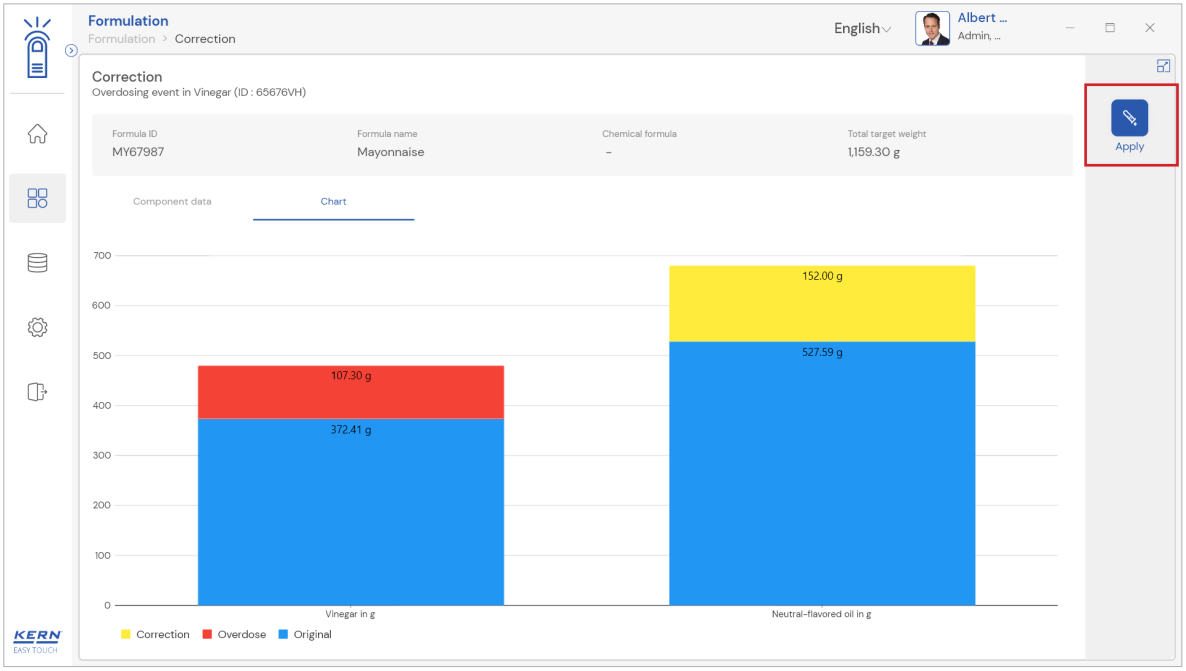
- Click on apply to apply the correction and see the effective target weight and restart the weighing



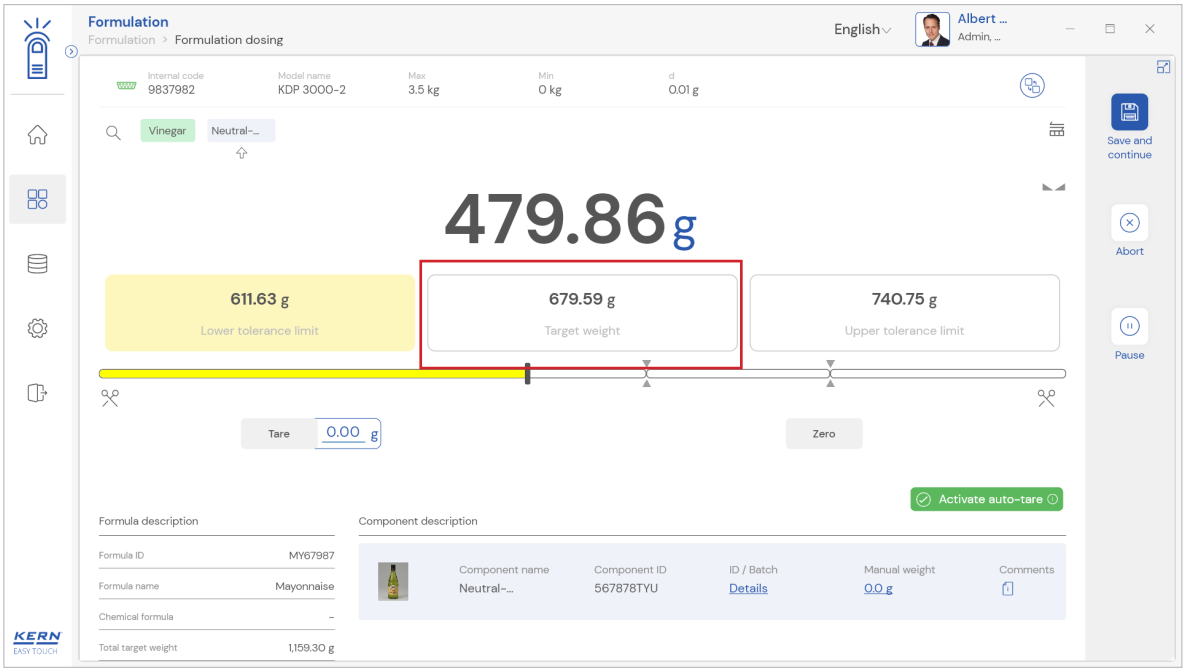
- The user will be provided with the graphical representation for the easy understanding with respect to the details overdosed.



- Upon clicking on apply, the recalculated target weight would be available for the user to start weighing or dosing



- Kindly note, this auto correction might be helpful only in the case of non-fixed sequence where the user might be able to again switch to the first component for reweighing.
- User might only have an option to abort in case of fixed sequence.



4.2 Underdose

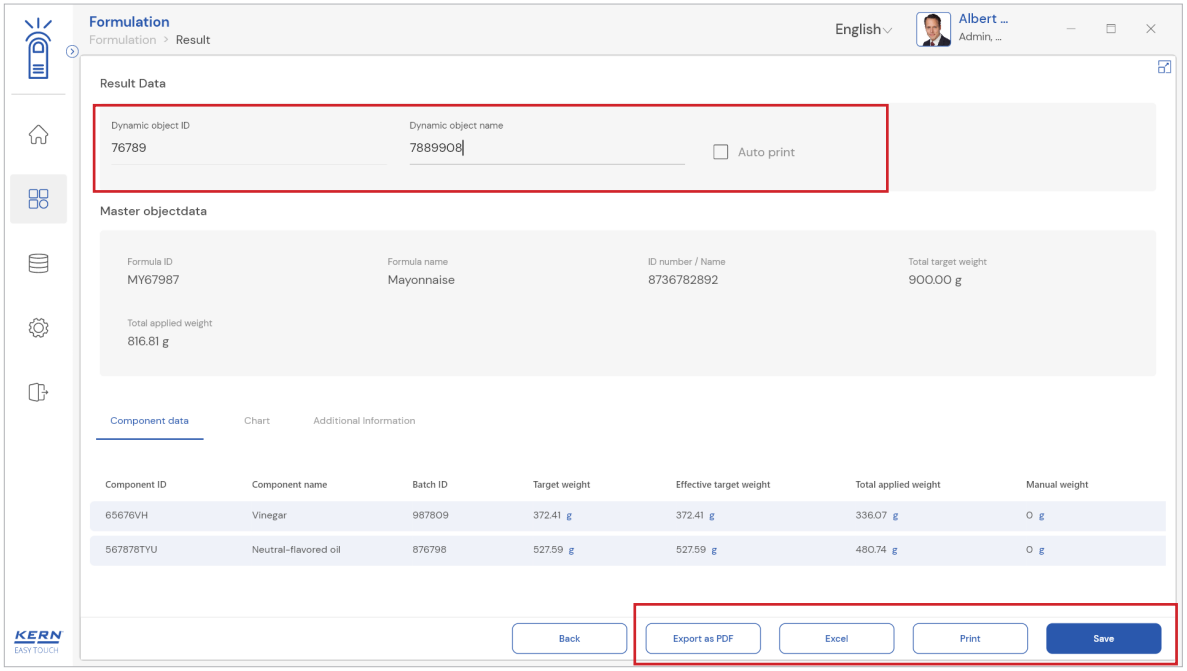
- Underdosing occurs when the component weight lies minimum than that of the lower tolerance. User might be able to proceed with weighing the next component only upon applying the correction.
- This might be useful in case where the industries might have less supply or will have the minimum quantity to prepare an item.
- Correction means the target weight of the remaining components will be automatically recalculated based on the weight of the overdosed component
- Click on apply to apply the correction and see the effective target weight and restart the weighing

- Kindly note, this underdose auto correction might be helpful only in the case of non-fixed sequence and only for the first component.
- User might only have an option to abort in case of fixed sequence.

5.0 Result data

5.1 Measurement data

An overview of the determined data appears upon clicking on the button “save & continue” in the last component.
The below screen appears and the user might be able to view the complete result data.



Here, the user might be able to

5.1.1 PDF, print and save

The user can save the data, generate the result data as an PDF or excel or print the results All the saved results would be found in the dynamic database

5.1.2 Dynamic object ID and name

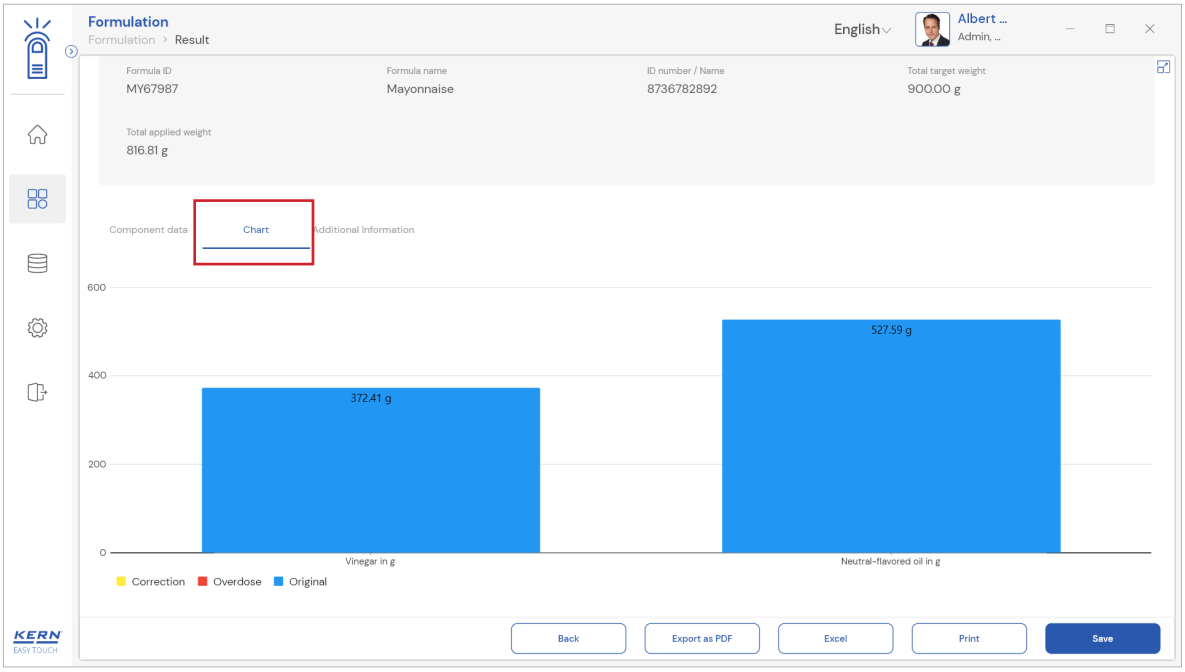
The user can enter a reference id and name to the weighing objects to stay unique and search based on the dynamic id and name in the dynamic database (after the result data is being saved) regarding the weighing results of an object

5.1.3 Auto print

The user will have an option to save and print on a single click. This allows the user to print the data with the measurement ID
Once the save button is clicked, the balance is again on weighing mode

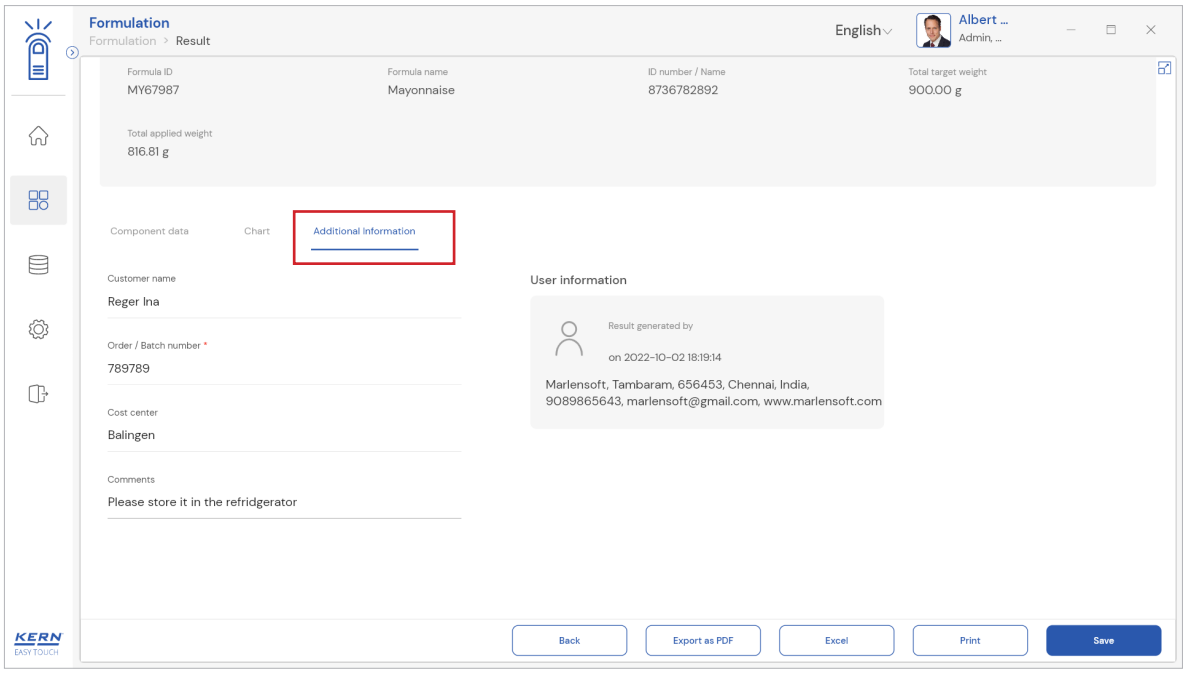
5.2 Chart

The effective measurements of the components in a product would be displayed in the graphical format for easy understanding to the user



5.3 Additional data

- Users will have an option to enter additional information as such the customer's name, order or batch number, cost center, and comments.

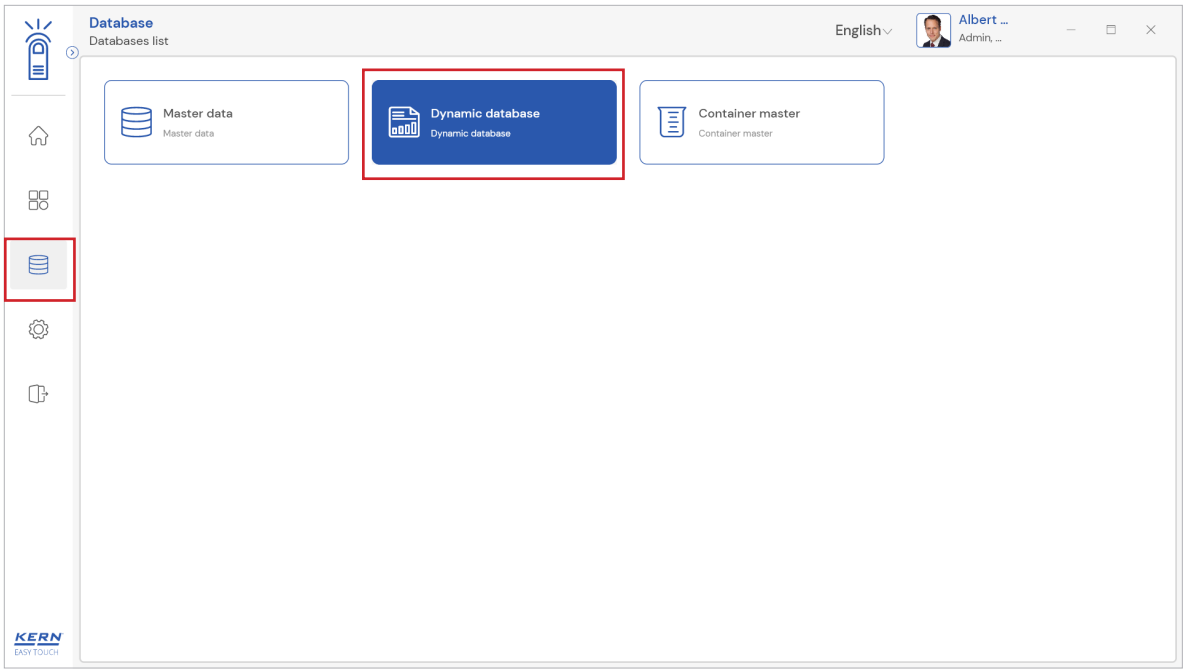


- The user can save the data, generate the result data as a PDF or excel or print the results. All the saved results would be found in the dynamic database.

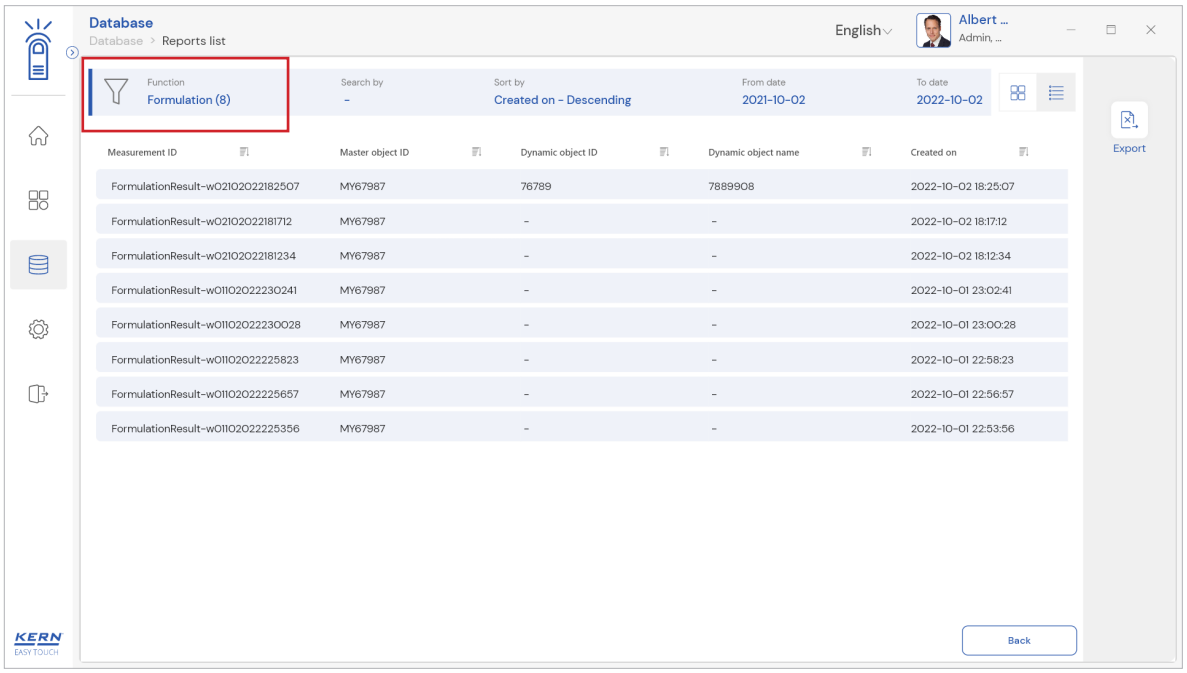
6.0 Dynamic data

6.1 Result data

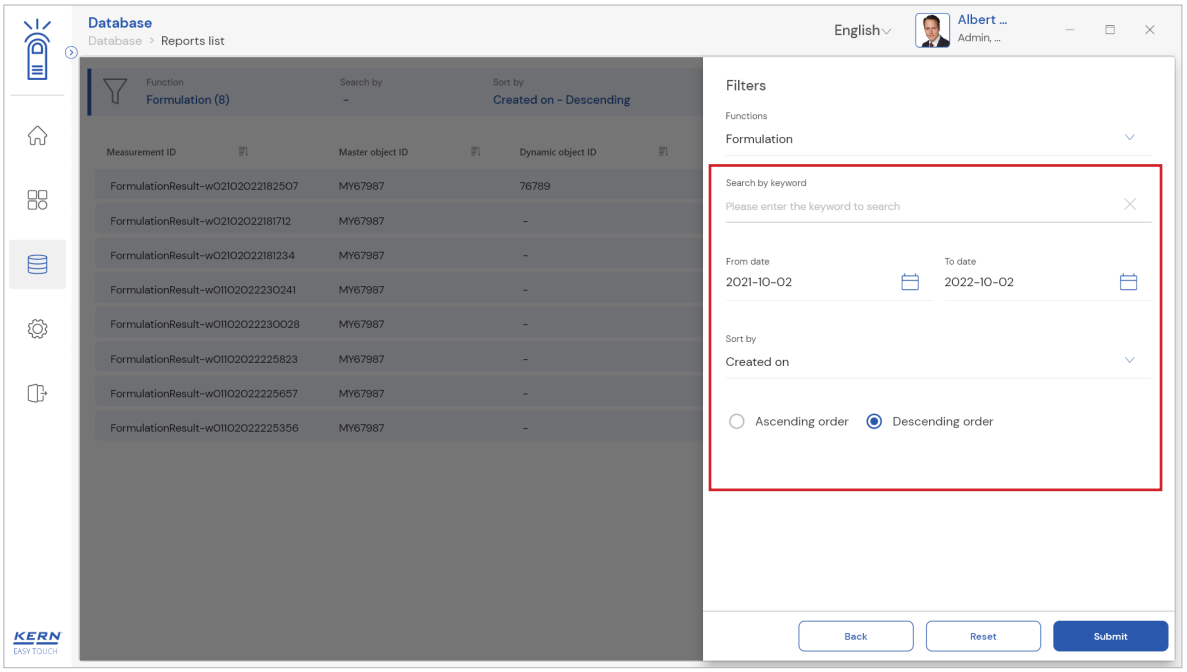
- All the saved data would be found in the dynamic database.
- Click on the database icon and navigate to the dynamic database



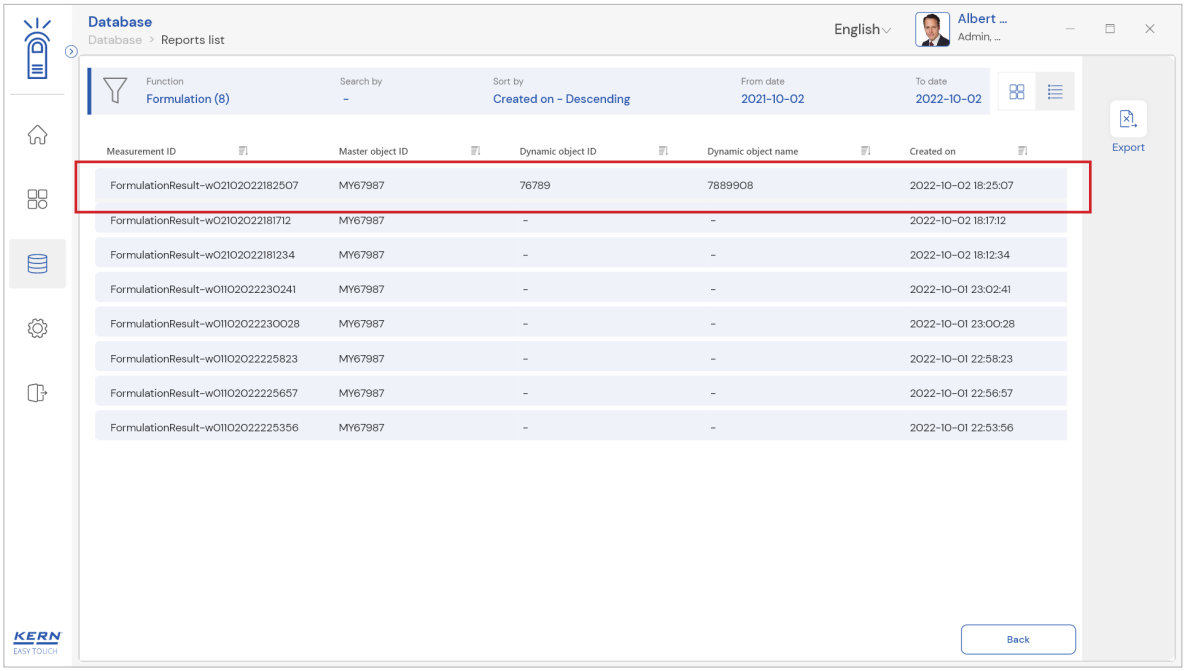
- Click on the filter and the below screen would be displayed. Kindly note, the last used function would be displayed by default



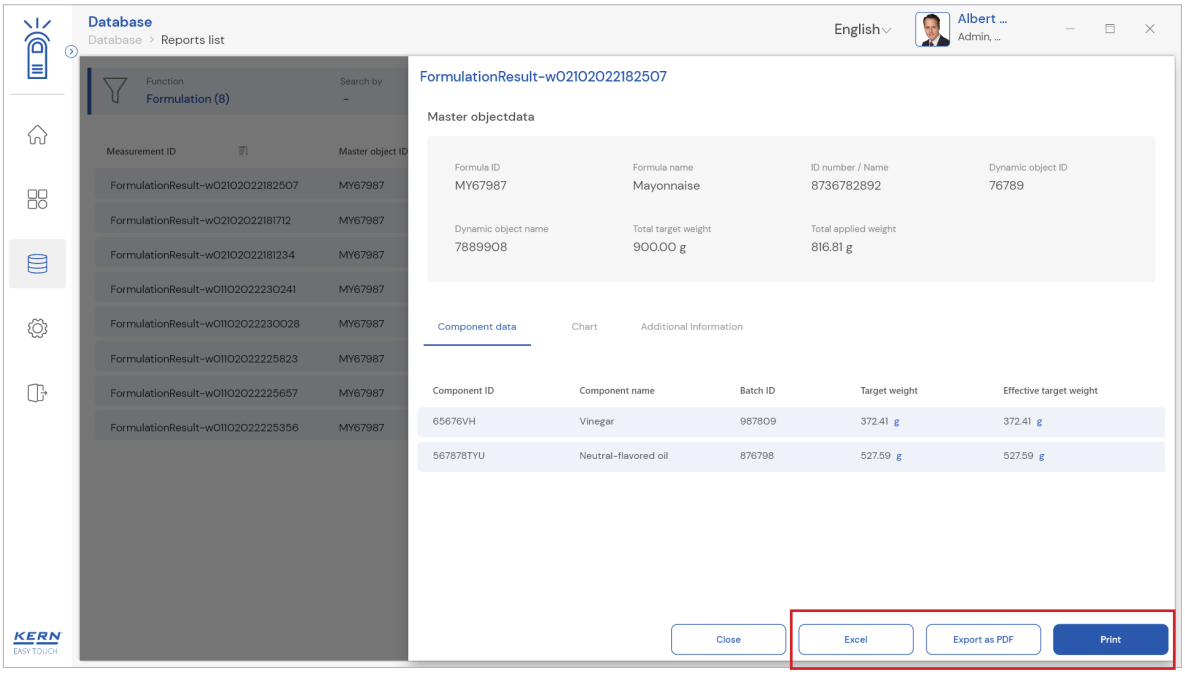
- Choose to use the filter to set the other desired filters and the required sort of option



- The list of dynamic data saved against the set filter would be found here
- Click on the required transactional data to see the complete set of details

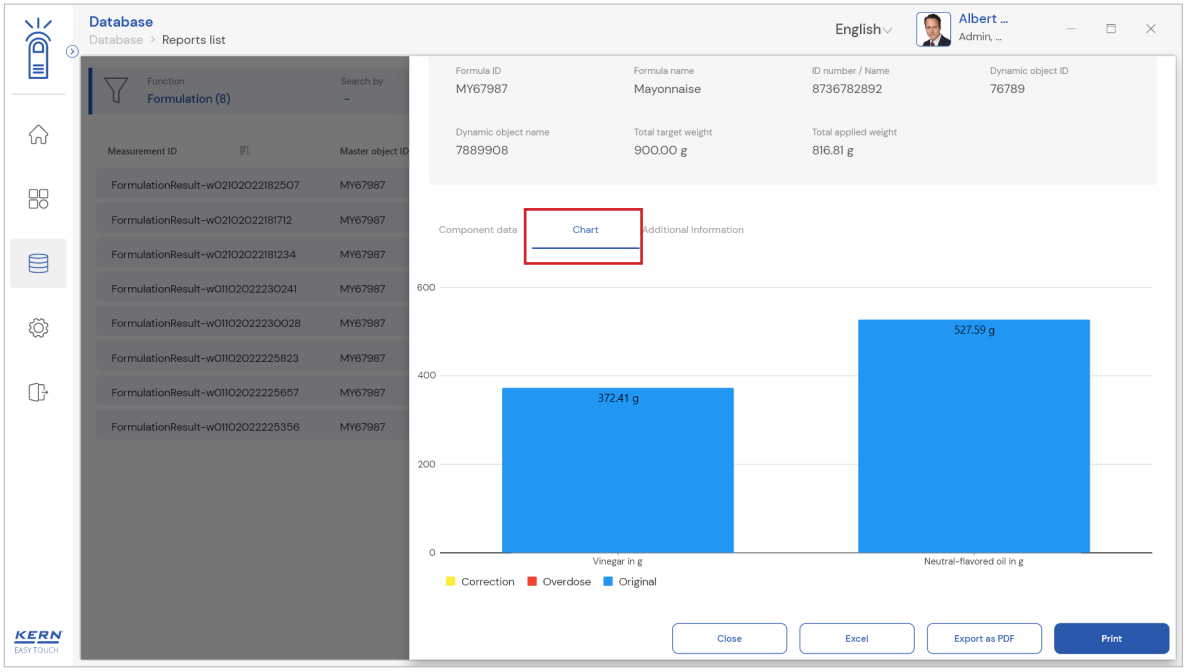


- The saved data can be printed or exported as PDF or excel.



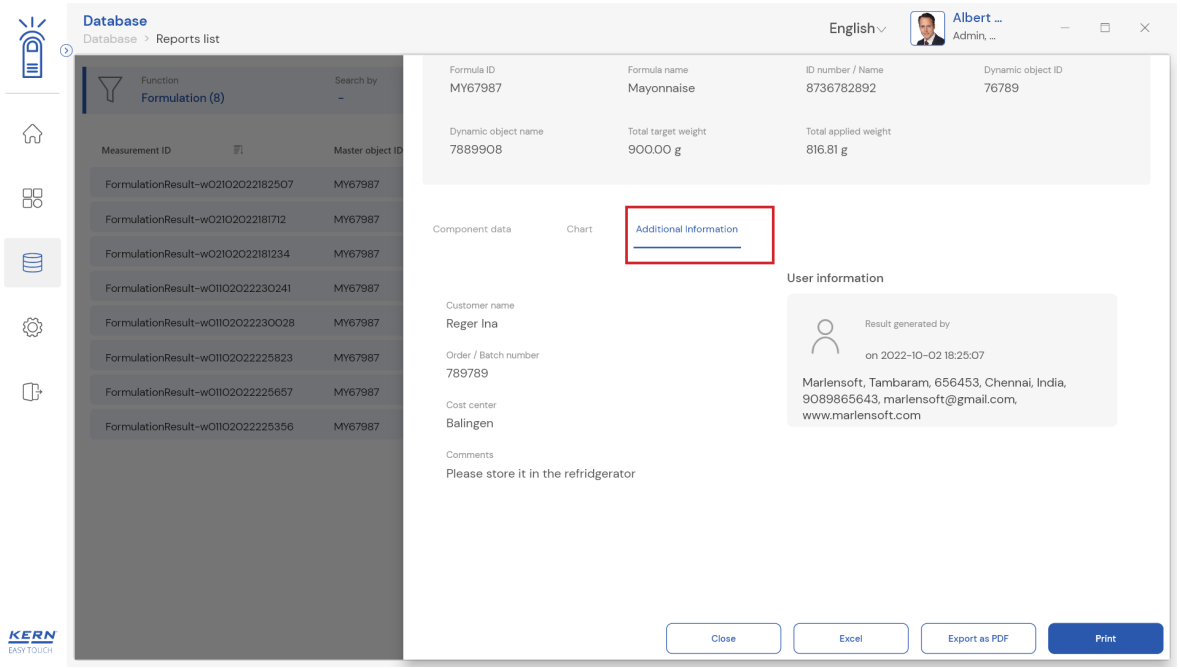
6.2 Chart

The admin user can be able to view the effective measurement in the graphical format for easy understanding and can be able to export the chart information in the form of PDF



6.3 Additional data and print

The additional information as such the customer's name, order or batch number, cost center, comments entered in the result data will be replicated here along with the user information (who saved the result)



The end

English