ITMProcess2

Select unit with a rule

Overview

Concerned   Supervisor

Subject   Units cannot be selected by a formula but, however, it is possible to introduce rules to select units.

Problem   Dyes quantities less than 10g must be expressed as a volume of a stock solution at 100% or 10%.

Solution   As formulas cannot be introduced to select a unit, we will introduce in the dye operation two dyes lines, one with a unit expressed as a volume and the other with a unit expressed as a weight.

To avoid from displaying twice a dye (one time for each unit), we will introduce a formula that sets quantity to zero when the unit is the wrong one. As the dyes quantities should not be definitively modified by these formulas, formulas will be set as 'display only'.

Write the rule

Units

%   % unit with result expressed as a weight

General | Settings | References

| ID: | % | AuxID: | |
| Name: | % | | |

Unit base type
- ○ g - weight
- ○ m - length
- ○ l - volume
- ○ ? - other
- ○ sec - time
- ● relative

Unit composition

g ▼ / hg ▼   => g ▼

	Max value	Result_ID
If Abs. amout >=	1000 ->	kg

%'   %' unit with result expressed as a volume

General | Settings | References

| ID: | %' | AuxID: | |
| Name: | percent - volume result | | |

Unit base type
- ○ g - weight
- ○ m - length
- ○ l - volume
- ○ ? - other
- ○ sec - time
- ● relative

Unit composition

g ▼ / hg ▼   => ml 10% ▼

	Max value	Result_ID
If Abs. amout >=	10 ->	ml

ml

General | Settings | References

| ID: | ml | AuxID: | |
| Name: | ml | | |

Unit base type
- ○ g - weight
- ○ m - length
- ● l - volume
- ○ ? - other
- ○ sec - time
- ○ relative

Conversion factor to base type
1 ml = 0,001 l.

ml 10%   ml 10% unit for solutions at 10%

General | Settings | References

| ID: | ml 10% | AuxID: | |
| Name: | ml of 10% solution | | |

Unit base type
- ○ g - weight
- ○ m - length
- ● l - volume
- ○ ? - other
- ○ sec - time
- ○ relative

Conversion factor to base type
1 ml 10% = 0,0001 l.

Operation

Both dyes lines are set as 'Display only formula'.

Formula that displays dyes over 10g

Formula that display dyes less or equal to 10g

Application

Dyelot

Production card

Extensions

Other conditions may be introduced in the formulas (change unit only in case of machine group …).

In this example, the selection of the stock solution is done via the unit (ml or ml 10%). If the choice of the stock solution is complex, it may be done via other dyes lines with the stock solutions units and related formulas.