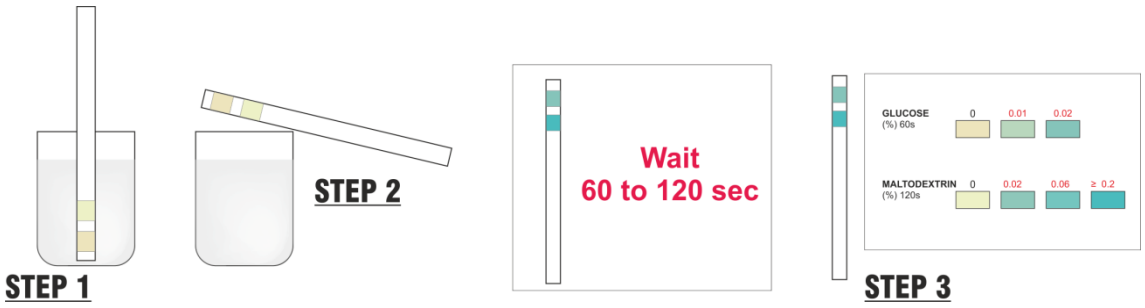
MILK SECURITY

Milk test strips for maltodextrin and glucose

Maltodextrin is hydrolyzed product of starch. Because of better solubility of maltodextrin and ambiguity in interpretation of iodide test for maltodextrin detection, milk is frequently adulterated with maltodextrin. Maltodextrin is not a permitted additive as per FSSAI Rules.

A rapid test strip for the detection of maltodextrin in milk is white in color. The test involves dipping the strip in milk followed by visualization of change in color of the strip. The color change to blue after about 2 minutes in case of milk is adulterated with maltodextrin. The intensity of blue colour produced in the strips is proportional to the amount of maltodextrin present in milk sample. The color change in maltodextrin strip also occurs in the presence of glucose or H_2O_2 in sample. For this reason, the label has two scales. The upper scale 1 is for glucose, the scale 2 for maltodextrin. When the concentration of glucose is less than 0.01% according scale 1 after 1 minute, the maltodextrin concentration is estimated only on the scale 2. This means that in the sample have very small glucose concentration and the maltodextrin change the test color to blue. When the concentration of glucose is more than 0.01% according scale 1 after 1 minute, the maltodextrin concentration cannot be precisely defined. This means that the sample contains not only maltodextrin but also glucose and the both of them change the test color (scale 1 and 2) to stronger blue. The 2 minutes time is required to carry out the reaction between maltodextrin and the selective test reagents. The test is highly sensitive. The test can detect the presence of 0.02%; 0.06% and 0.2% level of maltodextrin in milk.

Parameter	Concentrations			
Glucose	0	0.01%	0.02%	
Maltodextrin	0	0.02%	0.06%	≥0.2%



Step1. Dip the indicator zone of the test strips in a milk sample for 3 seconds.

Step 2. Completely remove all milk drops from it by tapping the test strip on the edge of the cup.
Step 3. Compare the color of the test strip with the color scale on the label.

Recommendations:

- Dip the test strip in milk sample, then **immediately** remove from milk and completely remove milk drops from the test paper by tapping the test strips on the edge of the cup. Then put the back side of test strips on filter paper or other paper for full removing of milk drops.
- Do not touch the indication area.
- When using the test take out only the necessary number of strips. Then the tube must be tightly closed (hear a click).

Storage: Express test strips should be stored in tightly closed tube in a dry and dark place, under 20^0C.

Expiration date: 10 months from date of production.

Last edited: November 2018 **BG, Milkotronic LTD**

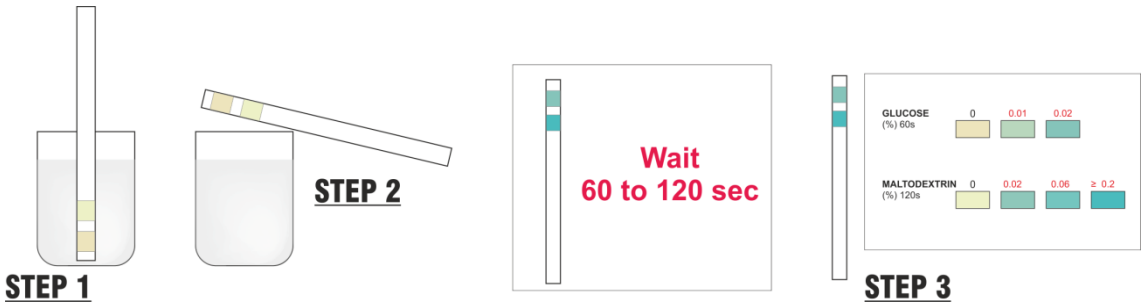
MILK SECURITY

Milk test strips for maltodextrin and glucose

Maltodextrin is hydrolyzed product of starch. Because of better solubility of maltodextrin and ambiguity in interpretation of iodide test for maltodextrin detection, milk is frequently adulterated with maltodextrin. Maltodextrin is not a permitted additive as per FSSAI Rules.

A rapid test strip for the detection of maltodextrin in milk is white in color. The test involves dipping the strip in milk followed by visualization of change in color of the strip. The color change to blue after about 2 minutes in case of milk is adulterated with maltodextrin. The intensity of blue colour produced in the strips is proportional to the amount of maltodextrin present in milk sample. The color change in maltodextrin strip also occurs in the presence of glucose or H_2O_2 in sample. For this reason, the label has two scales. The upper scale 1 is for glucose, the scale 2 for maltodextrin. When the concentration of glucose is less than 0.01% according scale 1 after 1 minute, the maltodextrin concentration is estimated only on the scale 2. This means that in the sample have very small glucose concentration and the maltodextrin change the test color to blue. When the concentration of glucose is more than 0.01% according scale 1 after 1 minute, the maltodextrin concentration cannot be precisely defined. This means that the sample contains not only maltodextrin but also glucose and the both of them change the test color (scale 1 and 2) to stronger blue. The 2 minutes time is required to carry out the reaction between maltodextrin and the selective test reagents. The test is highly sensitive. The test can detect the presence of 0.02%; 0.06% and 0.2% level of maltodextrin in milk.

Parameter	Concentrations			
Glucose	0	0.01%	0.02%	
Maltodextrin	0	0.02%	0.06%	≥0.2%



Step1. Dip the indicator zone of the test strips in a milk sample for 3 seconds.

Step 2. Completely remove all milk drops from it by tapping the test strip on the edge of the cup.
Step 3. Compare the color of the test strip with the color scale on the label.

Recommendations:

- Dip the test strip in milk sample, then **immediately** remove from milk and completely remove milk drops from the test paper by tapping the test strips on the edge of the cup. Then put the back side of test strips on filter paper or other paper for full removing of milk drops.
- Do not touch the indication area.
- When using the test take out only the necessary number of strips. Then the tube must be tightly closed (hear a click).

Storage: Express test strips should be stored in tightly closed tube in a dry and dark place, under 20^0C.

Expiration date: 10 months from date of production.

Last edited: November 2018 **BG, Milkotronic LTD**