#### Replacing Reagents on the Sysmex XN-3100 Hematology Analyzer

|  |  |
| --- | --- |
| **Background** | This procedure describes how to replace reagents on the Sysmex XN-3100 hematology analyzer |

|  |  |
| --- | --- |
| **Policy** | * Only appropriate, non-expired, Sysmex reagents will be used on the XN-3100.
* Reagent replacement will be done routinely only when the analyzer alarms for replacement.
* Discard used reagents in non-biohazard waste.
* Reagents must be at room temperature (15-30°C) before loading on analyzer.
* Verify reagents are not expired beyond the manufacturer's expiration date prior to loading
 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Reagents | Refer to the table below for the list of reagents

|  |  |  |  |
| --- | --- | --- | --- |
| **Reagent** | **Function** | **Storage** | **Open Stability** |
| CELLPACK DCL | Diluent | 2-35°C | 60 days |
| CELLPACK DST (RU-20) | Diluent | 2-35°C | 60 days |
| CELLPACK DFL | Diluent for flow cytometry analysis for retics and platelets | 2-35°C | 60 days |
| SULFOLYSER | RBC lysing reagent used in hemoglobin analysis | 1-30°C | 90 days  |
| Lysercell WNR | RBC lysing reagent in WBC, basophil, NRBC counts. | 2-35°C | 60 days |
| Lysercell WDF | RBC lysing reagent used in neutrophil, lymphocyte, monocyte, and eosinophil counts. | 2-35°C | 90 days |
| Fluorocell WNR | Dye used to stain nucleated cells in WBC, basophil, and NRBC counts | 2-35°C | 90 days |
| Fluorocell WDF | Dye used to stain WBCs for automated differential | 2-35°C | 90 days |
| Fluorocell RET | Dye used to stain reticulocytes | 2-35°C | 90 days |
| Fluorocell PLT | Dye used to stain platelets | 2-35°C | 90 days |

 |

Continued on next page

Replacing Reagents on the Sysmex XN-3100 Hematology Analyzer, Continued

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Reagent ReplacementProcedure A | Replace a New Dilution/Hemolytic Agent (includes Cellpack DST/DFL, Sulfolyser, Lysercell WNR/WDF)

|  |  |
| --- | --- |
| Step | Action |
| 1 | Access the Reagent Replacement screen in one of the following ways:* Review the Help dialog window that displays when an empty/expired reagent is detected during analysis to determine which reagent needs to be replaced, then click Execute.
* Click the Analyzer menu button, then click Reagent Replacement. Click the reagent level display then click the reagent to be replaced.
 |
| 2 | Click the Replace the Reagent box |
| 3 | Remove cap from new reagent. |
| 4 | Place cursor in the reagent code text box, then:* Use the barcode scanner to scan the reagent code barcode on outer box of new reagent, or
* Manually enter the reagent code (enter additional info as prompted) and click OK
 |
| 5 | Remove cap from old reagent container and pull the dispensing set straight up, out of container |
| 6 | Insert the dispensing set straight into the new reagent container |
| 7 | Close the cap |
| 8 | Click Execute. The Help dialog box will close when priming of new reagent is complete |
| 9 | Remove and discard the old reagent |

  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reagent ReplacementProcedure B | Replace a New Dye Cartridge ( includes Fluorocell WNR/WDF/RET/PLT)

|  |  |
| --- | --- |
| Step | Action |
| 1 | Access the Reagent Replacement screen in one of the following ways:* Review the Help dialog window that displays when an empty/expired reagent is detected during analysis to determine which reagent needs to be replaced, then click Execute.
* Click the Analyzer menu button, then click Reagent Replacement. Click the reagent level display then click the reagent to be replaced
 |

  |

Continued on next page

Replacing Reagents on the Sysmex XN-3100 Hematology Analyzer, Continued

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Reagent ReplacementProcedure B, cont |

|  |  |
| --- | --- |
| Step | Action |
| 2 | Open the top cover of the analyzer |
| 3 | Pull up the cover for the dye cartridge to be replaced |
| 4 | Remove the old dye cartridge from its holder and discard |
| 5 | Install the new dye cartridge into the holder. Make sure the new cartridge label color matches the color of the cover |
| 6 | Pull down the cover until it clicks. The analyzer will beep and automatically registers the new reagent information. |
| 7 | Close the top front cover of the analyzer. The Help dialog box will close when priming of new reagent is complete |

  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Reagent ReplacementProcedure C | Replace a New CellPack DST using the RU-20

|  |  |
| --- | --- |
| Step | Action |
| 1 | Access the RU-20 reagent replacement screen in one of the following ways:* Click OK in the Help dialog window that displays when an empty/expired CELLPACK DST is detected during analysis.
* Click the RU menu button, then click Maintenance (Wrench Icon). Click Replace Reagent.
 |
| 2 | Open the RU-20 reagent storage drawer slowly using the handle |
| 3 | In the Replace Reagent dialog box:* Use the barcode scanner to scan the reagent code on the new container, or
* Manually enter the reagent code (enter additional info as prompted) and click OK
 |
| 4 | Remove the cap from the new reagent container |
| 5 | Remove the cap from the old reagent container and pull out the dispensing set straight up, out of container |
| 6 | Insert the dispensing straight into the new reagent container |
| 7 | Close the cap |
| 8 | Click Execute. The Help dialog box will close when preparation and priming of new reagent is complete. |
| 9 | Remove and discard old reagent container |

  |

Continued on next page

Replacing Reagents on the Sysmex XN-3100 Hematology Analyzer, Continued

|  |  |
| --- | --- |
| References | * Sysmex XN 3100 Operator’s manual, March 2017
 |

 *End*