| clyzo - Monograph Compari Clyzo - |   |   |   |  |   |  |  |  |  |
|-----------------------------------|---|---|---|--|---|--|--|--|--|
| AS PER CURRENT USP 2022/EP11/JP18 |   |   |   |  |   |  |  |  |  |
|                                   | Product Name                                | Formaldehyde 37-38% w/w stabilized<br>with methanol (USP, BP, Ph. Eur.)<br>pure, pharma grade | PanReac 🌮   | Issue Date   | March-23  |  |  |  |  |
|                                   | Product Code                                | 141328  | AppliChem   | Prepared by  | Sr. Tech Lead   |  |  |  |  |
|                                   | CAS NO.                                     | 50-00-0   | nivi heagents   | Reviewed by  | Manager Technical   |  |  |  |  |
|                                   | Manufacturer Name                           | PanReac AppliChem   |   | Version no.  | CLYZO/PAN/141328/01   |  |  |  |  |
|                                   |   |   |   |  |   |  |  |  |  |
| Sr. No.                           | Test  | Manufacturer COA  | Pharmacopeial Specifications  |  |   |  |  |  |  |
| or. NO.                           |   | Complies USP, BP, Ph. Eur.  | USP 2022  | EP Version 11.0  | JP 18   |  |  |  |  |
| 1                                 | Descriprion                                 | Clear, colorless liquid   | Clear, colorless or practically colorless liquid, having a<br>pungent odor. The vapor from it irritates the mucous<br>membrane of the throat and nose. On long standing,<br>especially in the cold, it may become cloudy because of<br>the separation of paraformaldehyde. This cloudiness<br>disappears when the solution is warmed. | Clear,Colourless Liquid.It may be cloudy after storage                               | Clear, colorless liquid. Its vapor is irritating t<br>the mucous membrane.When stored for a<br>long time, especially in a cold place, it may<br>become cloudy |  |  |  |  |
| 2                                 | Solubility                                  | Miscible with water   | Miscible with water and with alcohol.   | Miscible with water and with ethanol (96 %)  | Miscible with water and with ethanol (95)   |  |  |  |  |
| 3                                 | Identification 1                            | Passes the Test   | Should comply by grey precipitate or a silver mirror<br>formation   | Should comply by grey precipitate or a silver mirror formation                       | Should comply by grey precipitate or a silve<br>mirror formation  |  |  |  |  |
| 4                                 | Identification 2                            | Passes the Test   | Should comply by dark red color development   | Should comply by dark red color development  | Should comply by dark red color developme   |  |  |  |  |
| 5                                 | Identification 3                            | Passes the Test   | Not mentioned   | Should comply by a violet-blue or violet-red colour development                      | Not mentioned   |  |  |  |  |
| 6                                 | Identification 4                            | Passes the Test   | Not mentioned   | Should comply with the limits of Assay   | Not mentioned   |  |  |  |  |
| 7                                 | Appearance of solution                      | Passes the Test   | Not mentioned   | Sample should be colourless  | Not mentioned   |  |  |  |  |
| 8                                 | Acidity                                     | Passes test (free HCOOH: NMT 0.03%)   | NMT 10.0 ml of 0.1 N NaOH is consumed   | NMT 0.4 ml of 0.1 M NaOH is required to change the<br>colour of the indicator to red | After addition of 5.0 ml 0.1M NaOH and 2<br>drops of bromothymol blue should develop<br>blue color  |  |  |  |  |
| 9                                 | Residue on ignition                         | NMT 0.05%   | Not mentioned   | Not mentioned  | NMT 0.06%   |  |  |  |  |
| 10                                | Sulphated Ash                               | Not mentioned   | Not mentioned   | NMT 0.1%   | Not mentioned   |  |  |  |  |
| 11                                | Methanol                                    | Between 9.0 % and 15.0 %  | Between 9.0 % and 15.0 %  | Between 9.0 % and 15.0 %   | Between 5 % and 13 %  |  |  |  |  |
| 12                                | Matter insoluble in water                   | Passes the Test   | Not mentioned   | Not mentioned  | Not mentioned   |  |  |  |  |
| 13                                | Chloride                                    | NMT 0.001%  | Not mentioned   | Not mentioned  | Not mentioned   |  |  |  |  |
| 14                                | Sulfate                                     | NMT 0.005%  | Not mentioned   | Not mentioned  | Not mentioned   |  |  |  |  |
| 15                                | Iron  | NMT 0.0005%   | Not mentioned   | Not mentioned  | Not mentioned   |  |  |  |  |
| 16                                | Assay                                       | Between 37.0% and 38.0%   | NLT 34.5%   | Between 34.5% and 38.0 %   | Between 35.0% and 38.0 %  |  |  |  |  |
| 17                                | Residual solvent                            | Passes the Test   | Not mentioned   | Not mentioned  | Not mentioned   |  |  |  |  |
|                                   | Elemental impurities (according to ICH Q3D) |   | Not mentioned   | Not mentioned  | Not mentioned   |  |  |  |  |
|                                   | Cd  | NMT 0.5 ppm   |   |  |   |  |  |  |  |
| ļ                                 | Pb  | NMT 0.5 ppm   |   |  |   |  |  |  |  |
|                                   | Assay                                       | NMT 1.5 ppm   |   |  |   |  |  |  |  |
|                                   | Hg  | NMT 1.5 ppm   |   |  |   |  |  |  |  |
|                                   | co  | NMT 5 ppm   |   |  |   |  |  |  |  |
|                                   | V   | NMT 10 ppm  |   |  |   |  |  |  |  |
|                                   | Ni  | NMT 20 ppm  |   |  |   |  |  |  |  |
|                                   | TI  | NMT 0.8 ppm   |   |  |   |  |  |  |  |
|                                   | Au  | NMT 10 ppm  |   |  |   |  |  |  |  |
|                                   | Pd  | NMT 10 ppm  |   |  |   |  |  |  |  |
|                                   |   | NMT 10 ppm  |   |  |   |  |  |  |  |
|                                   | Os  | NMT 10 ppm  | l   | l  | 1   |  |  |  |  |

|  | Rh   | NMT 10 ppm                      | 1   |  |                                  |  |  |  |  |
|--|--|---------------------------------|---|--|----------------------------------|--|--|--|--|
|  | Ru   | NMT 10 ppm                      | ]   |  |                                  |  |  |  |  |
|  | Se   | NMT 15 ppm                      |   |  |                                  |  |  |  |  |
|  | Ag   | NMT 15 ppm                      |   |  |                                  |  |  |  |  |
|  | Pt   | NMT 10 ppm                      |   |  |                                  |  |  |  |  |
|  | Li   | NMT 55 ppm                      |   |  |                                  |  |  |  |  |
|  | Sb   | NMT 120 ppm                     |   |  |                                  |  |  |  |  |
|  | Ва   | NMT 140 ppm                     |   |  |                                  |  |  |  |  |
|  | Mo   | NMT 25 ppm                      | ]   |  |                                  |  |  |  |  |
|  | Cu   | NMT 250 ppm                     |   |  |                                  |  |  |  |  |
|  | Sn   | NMT 600 ppm                     |   |  |                                  |  |  |  |  |
|  | Cr   | NMT 25 ppm                      |   |  |                                  |  |  |  |  |
|  | Storage  | Storage away from direct light. | Preserve in tight containers, and preferably store at a | Protected from light, at a temperature of 15°C to 25°C | Tight light resistant containers |  |  |  |  |
|  | -  | Storage between 15 and 25°C     | temperature not below 15°C                              |  |                                  |  |  |  |  |
|  |  |                                 |   |  |                                  |  |  |  |  |
| Note - If you need any additional testing, you may use our Additional Testing Feature on the product page or contact your Clyzo reprensentive. |  |                                 |   |  |                                  |  |  |  |  |
|  |  |                                 |   |  |                                  |  |  |  |  |
|  |  |                                 |   |  |                                  |  |  |  |  |
|  | Disclaimer - The information above is solely for your consideration. We do not recommend or affirm the suitability for any specific end use. We suggest the users should research & verify the specifications in accordance with their intended usage. |                                 |   |  |                                  |  |  |  |  |
|  |  |                                 |   |  |                                  |  |  |  |  |