

| P                     | Name of the Product                        | RPMI-1640   |  |
|-----------------------|--|---|--|
|                       |  | w/ L-Glutamine,25mM HEPES buffer and Sodium bicarbonate   |  |
| Code No.              |  | AL1060A   |  |
| Section 1 :           | Chemical Identification                    |   |  |
|                       | Code No. :                                 | AL1060A   |  |
| Name of the Product : |  | RPMI-1640   |  |
|                       |  | w/ L-Glutamine25mM HEPES buffer and Sodium  |  |
|                       | Droduced by                                | bicarbonate  Control Drug House But 11th  |  |
|                       | Produced by :                              | Central Drug House Pvt. Ltd.  |  |
|                       | Address :<br>Tel. No. :                    | 7/28 Vardaan House, Darya Ganj, New Delhi (INDIA)<br>00 91 11 49404040                          |  |
| Section 2             | Hazards Identification                     | 00 91 11 49404040   |  |
| Section 2             |  | About a su unitationa   |  |
|                       | 2.1 Classification of the sub              |   |  |
|                       |  | lation (EC) No. 1272/2008[EU-GHS/CLP] Ince or mixture according to Regulation (EC) No.1272/2008 |  |
|                       | 2.2 Label elements                         | ince of mixture according to Regulation (EC) NO.1272/2008                                       |  |
|                       |  | on to Domilation (EC) No. 4272/2000   |  |
|                       | _  | ng to Regulation (EC) No. 1272/2008   |  |
|                       | ine product does no                        | t need to be labelled in accordance with EC directives or respective national laws.             |  |
|                       | 2.3 Other Hazards                          |   |  |
|                       | None                                       |   |  |
|                       | None                                       |   |  |
| Section 3             | Composition/Information On Ingre           | adients   |  |
| Section 5             | Composition/Information On Ingredients     |   |  |
|                       | No components need to be disclose          | ed according to the applicable regulations.   |  |
|                       |  |   |  |
| Section 4             | First - Aid Measures                       |   |  |
|                       | 4.1 Description of first a                 | id measures   |  |
|                       | General advice                             |   |  |
|                       | Show this safety data                      | a sheet to the doctor in attendance.  |  |
|                       | If inhaled                                 |   |  |
|                       |  | person into fresh air. Consult a physician.   |  |
|                       | In case of skin conta                      |   |  |
|                       |  | and plenty of water. If skin irritation occurs, get medical advice/attention.                   |  |
|                       | In case of eye contact                     |   |  |
|                       | -  | y of water with the eyelid held wide open. If eye irritation persists,                          |  |
|                       | get medicaladvice/a<br><i>If swallowed</i> | itention.   |  |
|                       | _  | ater. Consult a physician if feeling unwell.  |  |
|                       |  | nptoms and effects, both acute and delayed  |  |
|                       | -  | known symptoms and effects are described in the labeling (see section 2.2)                      |  |
|                       | and/or in section 11.                      | •   |  |
|                       |  | liate medical attention and special treatment needed  |  |
|                       | No data available                          |   |  |
|                       |  |   |  |
| Section 5             | Fire Fighting Measures                     |   |  |
|                       | 5.1 Extinguishing media                    |   |  |
|                       | Suitable extinguishin                      |   |  |
|                       |  | easures that are appropriate to local circumstances and the surrounding                         |  |
|                       |  | ater spray, alcohol-resistant foam, dry chemical or carbon dioxide.                             |  |
|                       | Unsuitable extinguis                       |   |  |
|                       | -  | ing from the substance or mixture   |  |
|                       | Carbon oxides, Nitro                       | gen oxides (NOx), Sulphur oxides, Nature of decomposition products unknown                      |  |
| 1                     | 1  |   |  |



|           | T  |   |  |
|-----------|--|---|--|
|           | 5.3  | Precautions for fire-fighters   |  |
|           | 5.4  | No data available Further information   |  |
|           | 5.4  | Wear self-contained breathing apparatus for firefighting if necessary.  |  |
| Section 6 | Accidental   | Release Measures  |  |
| 3000000   | 7100101011101  | The lease in least to   |  |
|           | 6.1  | Personal precautions, protective equipment and emergency procedures   |  |
|           |  | Use personnel protective equipment. Wear disposable gloves, dust mask and eye   |  |
|           |  | protection. Avoiddust formation. For personal protection see section 8.   |  |
|           | 6.2  | Environmental precautions   |  |
|           |  | Prevent further leakage or spillage if safe to do so. No special environmental precautions required.  |  |
|           | 6.3  | Methods and materials for containment and cleaning up   |  |
|           |  | Keep in suitable, closed containers for disposal.   |  |
|           | 6.4  | Reference to other sections   |  |
|           | 0.4  | For disposal see Section 13.  |  |
|           |  | For disposal see Section 13.  |  |
| Section 7 | Handling and Storage   |   |  |
|           |  | cautions for safe handling  |  |
|           |  | id contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation  |  |
|           |  | laces where dust is formed. For precautions see section 2.2.  |  |
|           | -  |   |  |
|           |  |   |  |
|           | Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened           |   |  |
|           | must be carefully resealed and kept upright to prevent leakage.  **Recommended Storage Temperature:* store between 2 to 8° C |   |  |
|           |  |   |  |
|           | 7.3 Spe  | cific end uses  |  |
|           | Apa  | rt from the uses mentioned in section 1.2 no other specific uses are stipulated.  |  |
| Section 8 |  |   |  |
| JECTION 0 | Exposure (   | Controls / Personal Protection  |  |
| JECTION 0 | Exposure (   |   |  |
| Jection 6 | <u> </u>   | Control parameters  |  |
| JECTION 9 | 8.1  | Control parameters Components with workplace control parameters   |  |
| Section 6 | <u> </u>   | Control parameters Components with workplace control parameters Exposure controls   |  |
| JECTION 9 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls  |  |
| Section 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands   |  |
| Jection 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.   |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure Avoid contact with skin, eyes and clothing. Immediately change contaminated clothing.  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure Avoid contact with skin, eyes and clothing. Immediately change contaminated clothing.  Eye/face protection   |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure Avoid contact with skin,eyes and clothing. Immediately change contaminated clothing.  Eye/face protection Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection   |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure  Avoid contact with skin, eyes and clothing. Immediately change contaminated clothing.  Eye/face protection  Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure  Avoid contact with skin,eyes and clothing. Immediately change contaminated clothing.  Eye/face protection  Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).   |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure  Avoid contact with skin, eyes and clothing. Immediately change contaminated clothing.  Eye/face protection  Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure  Avoid contact with skin,eyes and clothing. Immediately change contaminated clothing.  Eye/face protection  Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).  Skin protection  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure Avoid contact with skin,eyes and clothing. Immediately change contaminated clothing.  Eye/face protection Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).  Skin protection The selected protective gloves have to satisfy the specifications of EU Directive  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure Avoid contact with skin,eyes and clothing. Immediately change contaminated clothing.  Eye/face protection Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).  Skin protection The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and thestandard EN 374 derived from it. Handle with gloves. Gloves must be  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters  Exposure controls  Appropriate engineering controls  Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment  Hygiene measure  Avoid contact with skin, eyes and clothing. Immediately change contaminated clothing.  Eye/face protection  Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).  Skin protection  The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and thestandard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's  |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure Avoid contact with skin,eyes and clothing. Immediately change contaminated clothing.  Eye/face protection Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).  Skin protection The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and thestandard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact withthis product. Dispose contaminated gloves after   |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls  Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment  Hygiene measure  Avoid contact with skin,eyes and clothing. Immediately change contaminated clothing.  Eye/face protection  Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).  Skin protection  The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and thestandard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact withthis product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. |  |
| JECTION 6 | 8.1  | Control parameters Components with workplace control parameters Exposure controls  Appropriate engineering controls Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaksand immediately after handling the products.  Personal protective equipment Hygiene measure Avoid contact with skin, eyes and clothing. Immediately change contaminated clothing.  Eye/face protection Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested andapproved under appropriate government standards such as NIOSH (US) or EN 166 (EU).  Skin protection The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and thestandard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact withthis product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry            |  |



|            | the specific workplace.  |  |  |  |
|------------|--|--|--|--|
|            | Respiratory protection   |  |  |  |
|            | For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher levelprotection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator |  |  |  |
|            |  |  |  |  |
|            | cartridges. Use respirators and components t   |  |  |  |
|            | government standards such as NIOSH (US) or CEN (EU).   |  |  |  |
|            | Environment exposure controls  |  |  |  |
|            | Do not let product enter drains.   |  |  |  |
| Section 9  | Physical and Chemical Properties   |  |  |  |
|            | 9.1 Information on basic physical and chemical prop  | perties  |  |  |
|            | Appearance   | Orangish red colored, clear solution                         |  |  |
|            | Odour  | No data available  |  |  |
|            | Odour Threshold  | No data available  |  |  |
|            | рН   | No data available  |  |  |
|            | Melting/freezing point   | No data available  |  |  |
|            |  | No data available  |  |  |
|            | Initial boiling point and boiling range  |  |  |  |
|            | Flash point  | No data available  |  |  |
|            | Upper/lower flammability or explosive limits   | No data available  |  |  |
|            | Evaporation rate   | No data available  |  |  |
|            | Flammability (Solid, gas)  | No data available  |  |  |
|            | Vapour pressure  | No data available  |  |  |
|            | Relative density   | No data available  |  |  |
|            | Partition coefficient: n-octanol/water   | No data available  |  |  |
|            | Autoignition Temperature   | No data available  |  |  |
|            | Decomposition Temperature  | No data available  |  |  |
|            | Viscosity  | No data available  |  |  |
|            | Explosive properties   | No data available  |  |  |
|            | Oxidizing properties   | No data available  |  |  |
|            | Vapour density   | No data available  |  |  |
|            | Thermal decomposition  | No data available  |  |  |
|            | Water solubility   | No data available  |  |  |
|            |  |  |  |  |
|            | 9.2 Other safety information  No data available  |  |  |  |
| Section 10 | Stability and Reactivity   |  |  |  |
|            | 10.1 Reactivity  |  |  |  |
|            | No data available  10.2 Chemical stability   |  |  |  |
|            | •  | nsspecified understorage of Section No. 7. Product loses its |  |  |
|            | potency/performance above 45°C.  |  |  |  |
|            | 10.3 Possibility of hazardous reactions  |  |  |  |
|            | No data available  |  |  |  |
|            | 10.4 Conditions to avoid   |  |  |  |
|            | Heat and light   |  |  |  |
|            | 10.5 Incompatible materials  No data available   |  |  |  |
|            | I INO GALA AVAIIADIE   |  |  |  |



|            | 10.6 Hazardous decomposition products  None under normal use conditions. Other decomposition products. No data available. In event of fire – refer section 5 |  |  |
|------------|--|--|--|
| Section 11 | Toxicological Information  |  |  |
|            | 11.1 Information on toxicological effects  |  |  |
|            | Acute toxicity   |  |  |
|            | May be harmful if swallowed.   |  |  |
|            | Skin corrosion/irritation  |  |  |
|            | No data available  |  |  |
|            | Serious eye damage/eye irritation  |  |  |
|            | No data available  |  |  |
|            | Respiratory or skin sensitisation  |  |  |
|            | No data available  |  |  |
|            | Germ cell mutagenicity   |  |  |
|            | No data available  |  |  |
|            | Carcinogenicity  |  |  |
|            | IARC: No component of this product present at levels greater than or equal to 0.1% is identified as  |  |  |
|            | probable, possible or confirmed human carcinogen by IARC.  |  |  |
|            | Reproductive toxicity  |  |  |
|            | No data available  |  |  |
|            | Specific target organ toxicity- single exposure  |  |  |
|            | No data available  |  |  |
|            | Specific target organ toxicity - repeated exposure   |  |  |
|            | No data available  |  |  |
|            | Aspiration hazard  |  |  |
|            | No data available  |  |  |
| Section 12 | Ecological Information   |  |  |
| Section 12 | 12.1 Toxicity  |  |  |
|            | No data available  |  |  |
|            | 12.2 Persistence and degradability   |  |  |
|            | No data available  |  |  |
|            | 12.3 Bioaccumulative potential   |  |  |
|            | No data available  |  |  |
|            | 12.4 Mobility in soil  |  |  |
|            | No data available  |  |  |
|            | 12.5 PBT and vPvB assessment   |  |  |
|            | PBT and vPVB assessment not available Chemical safety assessment is not required   |  |  |
|            | 12.6 Other adverse effects   |  |  |
|            | No data available  |  |  |
| Section 13 | Disposal Considerations  |  |  |
|            | 13.1 Waste treatments methods  |  |  |
|            | Product  |  |  |
|            | Offer surplus and non-recyclable solutions to a licenced disposal company. Dispose off waste in  |  |  |
|            | accordance with all applicable Federal, state and local laws.  |  |  |
|            | 13.2 Contaminated packaging  |  |  |
|            | Dispose in accordance with all applicable federal, state, and local environmental regulations.   |  |  |



| Section 14 | Transport Information  |  |  |
|------------|--|--|--|
|            | 14.1 UN-No   |  |  |
|            | ADNR : ADR : IATA_C : IATA_P : IMDG : RID :  |  |  |
|            | 14.2 UN proper shipping name ADNR : Not dangerous goods ADR : Not dangerous goods  |  |  |
|            |  |  |  |
|            | IATA_C : Not dangerous goods   |  |  |
|            | IATA_P : Not dangerous goods   |  |  |
|            | IMDG : Not dangerous goods   |  |  |
|            | RID : Not dangerous goods  |  |  |
|            | 14.3 Transport hazard class(es)  |  |  |
|            | ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID : -  |  |  |
|            | 14.4 Packaging group   |  |  |
|            | ADNR: ADR: IATA_C: IATA_P: IMDG: RID:  |  |  |
|            | 14.5 Environmental hazards   |  |  |
|            | 14.6 Special precautions for use  No data available  |  |  |
| Section 15 | Regulatory Information   |  |  |
|            | This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.   |  |  |
|            | 15.1 Safety health and environment regulations/legislation specific for the substance or mixture   |  |  |
|            | No data available  |  |  |
|            | 15.2 Chemical Safety Assessment  |  |  |
|            | No data available  |  |  |
| Section 16 | Other Information  |  |  |
|            | Further Information  |  |  |
|            | The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose. |  |  |
|            |  |  |  |