MATERIAL SAFETY DATA SHEET

Name of Product : RAYON TYRE YARN

Date : 02-05-2014

International Standard 11014-1

1. **Product and Company information**:
   (s) Product name (as on label) : Rayon Tyre Yarn
   (a) Product code : NIL
   Supplier :
     (s) Name : CENTURY RAYON
     (s) Address : P.O. Box-22, Murbad Rd. Shahad, 421 103.
     (s) Telephone number : 0091251 - 2733670 (10 lines)
     (a) Emergency telephone number : 0091251 - 2733670
     (a) E-Mail : orc@cenrayon.com

2. **Hazards Identification**:
   (i) Most important hazards
     (a) Adverse human health effects : NIL
     (a) Environmental effects : NIL
     (a) Physical and chemical hazards : NIL
   (i) Specific hazards : NIL
   (a) Main symptoms : Not Applicable
   (a) Classification of preparation : Not Applicable
   (a) "Emergency Overview" : NIL

3. **Composition / Information on Ingredients**:
   (s) Substance of preparation : Wood Pulp
     For a substance :
     (s) Common chemical name or generic name : CELLULOSE
     (a) Synonyms : NIL
     (a) Chemical Abstract Service Registry Number (CAS number) : Not Available
     (i) Ingredients contributing to the hazard : NIL
       For a Preparation :
       (i) Chemical nature : Regenerated Cellulosic Fibre
       (i) Components contributing to the hazard : NIL
       (a) Impurities contributing to the hazard giving for each component or impurity
         (i) Chemical or generic name : Not Applicable
         (i) Concentration or concentration range : Not Applicable
         (i) Classification and hazard labelling : Not Applicable
         Classification system used
4. First-Aid Measures:
   (s) Information subdivided into sub-headings:
      (a) Inhalation: NIL
      (a) Skin contact: NIL
      (a) Eye contact: NIL
      (a) Ingestion: NOT TO BE INGESTED
   (a) brief description of the most important symptoms and effects: NIL
   (a) protection of first-aiders: NIL
   (a) notes to a physician: Not Applicable

5. Fire - Fighting Measures:
   Not inflammable, but combustible like cotton.
   Extinguishing Media:
      (i) Suitable: CO2, Water
      (a) NOT suitable: CTC
   (a) Specific hazards: Grey smoke during burning. Residue forms Ash (black mass).
   (a) Specific methods: NIL
   (a) Protection of fire-fighters: NOT SPECIFIC

6. Accidental Release Measures:
   Not Applicable, as product is in stable form.
   (i) Personal precautions: NIL
   (i) Environmental precautions: NIL
   (s) Methods for cleaning up
      (a) Recovery: Not Applicable
      (a) Neutralisation: Not Applicable
      (a) Disposal: Not Applicable
   (a) Prevention of secondary hazards: Not Applicable

7. Handling And Storage:
   (i) Handling: Product is packed in palletised or box form for ease of mechanical handling by fork lift.
   (i) Technical Measures
      (a) Prevention of user exposure: Not reqd. as not hazardous
      (a) Prevention of fire and explosion: Not reqd. as product is neither inflammable nor explosive
   (i) Precautions: Preferably enclosed warehouse with normal measures for safety of goods.
   (i) Safe handling advice: Fork Lift / Pallet Truck / Manual
   (i) Storage: Ambient, Safe enclosed space.
   (i) Technical measures
      Storage conditions
         (i) Suitable: Dry enclosed storage space
         (a) To be avoided: High Humidity Area, Water Leakages, Sunlight.
   (i) Incompatible products
      Packaging Materials
         (i) Recommended: Polyethylene covers & corrugated paper.
         (a) NOT suitable: Rough Surface Material.
**8. Exposure Controls / Personal Protection:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Engineering measures</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Control parameters</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Limit values</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Biological standards</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Recommended monitoring procedures</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(i) Personal protective equipment</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Respiratory protection</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Hand protection</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Eye protection</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Skin and body protection</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Hygiene measures</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

**9. Physical And Chemical Properties:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(s) Physical state</td>
<td>SOLID</td>
</tr>
<tr>
<td>(a) Form</td>
<td>FIBRE (Continuous Spun Filament Yarn)</td>
</tr>
<tr>
<td>(s) Colour</td>
<td>Natural Off White (Violet tinted in case of 2200 D)</td>
</tr>
<tr>
<td>(s) Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>(i) pH</td>
<td>10% Soln. 7.0 to 9.0</td>
</tr>
<tr>
<td>(i) Point or range of boiling / melting / sublimation</td>
<td>Does not boil / melt / sublime</td>
</tr>
<tr>
<td>(a) Decomposition temperature</td>
<td>Decomposes to Carbon at @ 190°C</td>
</tr>
<tr>
<td>(i) Flashpoint</td>
<td>Not Known</td>
</tr>
<tr>
<td>(a) Autoignition temperature</td>
<td>Does not ignite on its own.</td>
</tr>
<tr>
<td>(i) Explosion properties</td>
<td>Non Explosive</td>
</tr>
<tr>
<td>(a) Vapour pressure</td>
<td>Not Relevant</td>
</tr>
<tr>
<td>(a) Vapour density</td>
<td>Not Relevant</td>
</tr>
<tr>
<td>(i) Density</td>
<td>1.52</td>
</tr>
<tr>
<td>(i) Solubility</td>
<td>Soluble in Formic Acid</td>
</tr>
<tr>
<td>(a) Octanol / water partition co-efficient</td>
<td>Not Relevant</td>
</tr>
<tr>
<td>(a) Other relevant data</td>
<td>NIL</td>
</tr>
</tbody>
</table>

**10. Stability And Reactivity:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Stability</td>
<td>Highly Stable</td>
</tr>
<tr>
<td>(i) Hazardous reactions</td>
<td>NIL</td>
</tr>
<tr>
<td>(a) Conditions to avoid</td>
<td>Moist</td>
</tr>
<tr>
<td>(a) Material to avoid</td>
<td>Fire</td>
</tr>
<tr>
<td>(i) Hazardous decomposition products</td>
<td>Decomposes to carbon at about 190°C.</td>
</tr>
</tbody>
</table>

**11. Toxicological Information:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Acute Toxicity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(i) Local effects</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Sensitization</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Chronic toxicity or long term toxicity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(a) Specific effects</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
12. **Ecological Information**:

   (i) Possible environmental effects, behaviour and fate

   (a) Mobility : Not Applicable
   (a) Persistence / degradability : BIODEGRADABLE
   (a) Bioaccumulation : Not Applicable
   (a) Ecotoxicity : Non Toxic

   Ecological limit values : Not Applicable

13. **Disposal Considerations**:

   (i) Waste from residues : Dispose as biodegradable solid waste
   (i) Contaminated Packaging : Dispose as biodegradable solid waste

14. **Transport Information**:

   (i) International regulations : No Specific Regulation
   (a) Land (RID / ADR) : Not Restricted
   (a) Inland Waterways : Not Restricted
   (a) Sea (IMDG) : Not Restricted
   (a) Marine Pollutant : No
   (a) Air (IATA) : Not Restricted
   (a) UN classification number : Not Known
   (a) Additional transport regulations : Nil
   (a) Specific precautionary transport measures : Nil

15. **Regulatory Information**:

   (a) Regulations specifically applicable to the chemical product : Not Restricted
   (a) Hazard and safety information written on the product label. : Nil

16. **Other Information** : Nil

17. **Revised by**:

   Mr. V.K.Jhingon, Joint President (Tyre Cord, CSY & TQM)
   Tel. - 0091251 - 2733670 (Extn. 439)