Material Safety Data Sheet

Date: 6th April 2016
Product Name: NATURAL RUBBER LATEX CONCENTRATE (CL60 LA)

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Product Name: NATURAL RUBBER LATEX CONCENTRATE (CL60 LA)
Synonym(s): cis-1,4-polyisoprene
Intended/Possible Product Use: For dipped products, extruded latex thread, foam, adhesives and other products.
Emergency Telephone: (Thailand) +662 751-7171

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation: RUBBER LATEX IS A STABLE COLLOIDAL DISPERSION

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>EINECS/ELINCS</th>
<th>Classification</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Rubber Latex</td>
<td>9006-04-6</td>
<td>232-689-0</td>
<td>Not classified</td>
<td>60 - 61</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>Not classified</td>
<td>38 - 39</td>
</tr>
<tr>
<td>Ammonia</td>
<td>7664-41-7</td>
<td>231-635-3</td>
<td>R20-36/37/38</td>
<td>0.20-0.25</td>
</tr>
</tbody>
</table>

Other components are either not CHIP classified or are below the concentration limit for classification.

3. HAZARDS IDENTIFICATION

Physical & Chemical:
Health: ACCORDING TO EXPERIENCE, THE PRODUCT IS HARMLESS TO HEALTH IF HANDLED IN THE CORRECT MANNER.
Environmental: ACCORDING TO EXPERIENCE, THE PRODUCT IS HARMLESS TO THE ENVIRONMENT IF HANDLED IN THE CORRECT MANNER.
Further Information:

4. FIRST AID MEASURES

General information: Take measures to avoid further contamination or contact.
Inhalation: If inhaled, provide fresh air, warmth, rest and SEEK MEDICAL ADVICE.
Skin contact: Clean areas of skin affected immediately with soap and plenty of water.
Eye contact: In case of contact with eyes, rinse immediately with plenty of water until irritation subsides. If necessary (e.g. irritation persists), consult an eye specialist/ophthalmologist.
Ingestion: Give copious water to drink and if necessary seek medical advice. Do not induce vomiting.

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4. FIRST AID MEASURES

Further information

5. FIRE FIGHTING MEASURES

General hazard  THE PRODUCT IS NON COMBUSTIBLE
Extinguishing media  To suit local surroundings (e.g. water fog spray, water jets, carbon dioxide, foam, dry chemical powder)
Extinguishing media not to be used
Special exposure hazards  Aqueous dispersion of chemicals would not burn. If temperature reaches 100°C the water phase may spatter. Decomposition of dry products released in a fire should be considered toxic if inhaled.
Protective equipment  Wear self-contained breathing apparatus and a chemical resistant suit.
Further information  Cool containers / tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up  Adhere to personal protective measures.
Take up with absorbent material, e.g. sand, sawdust, into tightly closable containers. Label container and dispose off according to national regulations.
Environmental considerations  Do not discharge into drains or rivers.
Further information

7. HANDLING & STORAGE

Advice on safe handling  Handle in accordance with good hygiene and safety practice. Ensure there is sufficient ventilation of the area.
Storage conditions  Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry. Store indoors at between 10 and 35°C
Further information

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls

<table>
<thead>
<tr>
<th>Level</th>
<th>Concentration</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTEL (8 hour TWA):</td>
<td>25 ppm</td>
<td>mg/m³ for ammonia</td>
</tr>
<tr>
<td>STEL (15min)</td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
</tbody>
</table>

Engineering controls  Provide local exhaust ventilation.
Personal protection  Observe normal standards for handling chemicals.
Wash hands before breaks and after work.
Wear personal protective equipment appropriate to the task (see below).
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection  Safety goggles.
Skin protection  Suitable gloves.
Respiratory protection  Respirator or air fed visor (if ventilation is insufficient).
Other protection  Protective overalls.
Further Information  Personal protective equipment should be selected as appropriate to the nature and aggressiveness of the identified hazard(s). It should be regularly inspected for such things as soundness against leaks, bad fitting and possible chemical penetration. Recommended safe user periods should never be exceeded.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical form  Suspension in water
Colour  White
Odour  Ammonia
Molecular weight
Molecular formula
pH  10.0 – 11.0
Boiling pt / range  Approx. 100°C (of water phase)
Melting pt / range
General Flammability  Non combustible
Flash point
Autoflammability  0.95 – 0.96 gm/cc
Density
Explosive limits
Vapour pressure  NA
Vapour Density  Approx. equal water (Air = 1)
Relative Evaporation Rate  NA
(n Butyl Acetate = 1)
Viscosity  < 120 cps (Brookfield, Spindle 1/60 rpm)
Water solubility  Dispersible in water
Partition coefficient (log P n-octanol / water)
Additional information

10. STABILITY & REACTIVITY

Stability  Stable under normal conditions of handling.
## 10. STABILITY & REACTIVITY

<table>
<thead>
<tr>
<th>Thermal decomposition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditions to avoid</strong></td>
<td>Exposure of large surface area in poorly ventilated room.</td>
</tr>
<tr>
<td><strong>Material to avoid</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hazardous reactions</strong></td>
<td>Hazardous polymerisation will not occur.</td>
</tr>
<tr>
<td><strong>Hazardous decomposition products</strong></td>
<td>Dry rubber, when ignited, will give off toxic fumes and smoke.</td>
</tr>
<tr>
<td><strong>Further information</strong></td>
<td></td>
</tr>
</tbody>
</table>

## 11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal compatibility</td>
<td>May cause skin irritation and sensitisation on prolonged exposure. Contains natural rubber, which may cause allergic reaction in some people.</td>
</tr>
<tr>
<td>Mucous membrane compatibility</td>
<td>May cause irritation to eyes.</td>
</tr>
<tr>
<td><strong>Further information</strong></td>
<td>Other effects of overexposure may include headache and dizziness. Consideration should be given to section 15 of this safety data sheet, noting any identified hazards for this product and route of entry whereby harm could be caused to body tissues and organs.</td>
</tr>
</tbody>
</table>

## 12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degradability</td>
<td>Natural rubber is biodegradable.</td>
</tr>
<tr>
<td><strong>Further information</strong></td>
<td>Consideration should be given to any environmental or health hazards indicated in section 3, and the physical properties indicated in section 9, of this safety data sheet, in the light of any possible damage to wildlife or to the environment in land, water, air or upper atmosphere.</td>
</tr>
</tbody>
</table>

## 13. DISPOSAL CONSIDERATIONS

| Advice on disposal | In accordance with national (i.e. Special Waste Regulations) and local authority regulations, e.g. special waste or incineration. |
| Contaminated packaging | Treat empty containers in the same way as the product or if possible wash out thoroughly and recycle. |
| **Further information** |  |

## 14. TRANSPORT INFORMATION

| United Nations number | The product is not classified for transport |
| Proper shipping name |  |
| Primary hazard class |  |
14. TRANSPORT INFORMATION

Secondary hazard class(es)
Packing group
Marine pollutant
Emergency action code
Further information

15. REGULATORY INFORMATION

Classification & labelling
The product is categorised in accordance with the Chemicals (Hazard Information and Packaging for Supply) Regulations (CHIP 3).

IRRITANT

Risk phrases
R20 HARMFUL BY INHALATION
R36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN

Safety phrases
S29 DO NOT EMPTY INTO DRAINS
S51 USE ONLY IN WELL VENTILATED AREAS

16. OTHER INFORMATION

General summary

Further information
CAUTION - The substance has not been fully tested.
The classification has been determined using the conventional method for preparations.

Sources of data
Thai Rubber Latex Corporation (Thailand) Public Company Limited and other suppliers' safety data sheets.

Reason for revision

Sections revised
This information is based on our present state of knowledge and based on data considered to be accurate at the time of its preparation. It is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific properties.