# MATERIAL SAFETY DATA SHEET

**SODIUM TRIPOLYPHOSPHATE (STPP)**

## SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**Date of Issue:** 27/09/03  
**Rev-02**

<table>
<thead>
<tr>
<th>1.1 Product Details</th>
<th></th>
</tr>
</thead>
</table>
| **1.1.1 Product name** | 1. Sodium Tripolyphosphate - Anhydrous  
2. Sodium Tripolyphosphate - Hydrated |
| **1.1.2 Chemical name** | 1. Sodium Tripolyphosphate Anhydrous  
2. Sodium Tripolyphosphate Hexahydrate |
| **1.1.3 Chemical formula** | 1. Na₅P₃O₁₀  
2. Na₅P₃O₁₀·₆H₂O |
| **1.2 Company** | Aditya Birla Chemicals  
77 Moo 6 Soi Sukhaphiban 1,  
Poochao Saming Prai Road,  
Samrong, Phrapradaeng,  
Samutprakarn 10130  
Telephone: +66 (0) 2396 1715-6, 2748 5173–4  
Fax: +66 (0) 2398 0774  
E-mail: mktg@thaipoly.co.th  
Website: [www.thaipoly.com](http://www.thaipoly.com) |
| **1.3 Emergency** | Telephone: +66 (0) 2396 1715 - 6, 2748 5173 –4 |

## SECTION 2: COMPOSITION

| 2.1 Ingredients | 1. Sodium Tripolyphosphate Anhydrous (Na₅P₃O₁₀)  
2. Sodium Tripolyphosphate Hexahydrate (Na₅P₃O₁₀·₆H₂O) |
| 2.2 CAS Number | 7758-29-4 (Anhydrous)  
15091-98-2 (Hexahydrate) |

## SECTION 3: HAZARDS

| 3.1 No known hazards |  |
SECTION 4: FIRST AID MEASURES

4.1 Eye Contact | Rinse immediately with plenty of water and obtain medical advice if irritation persists.
4.2 Skin contact | Wash off with plenty of water.
4.3 Inhalation / Ingestion | If any symptoms follow ingestion or inhalation, obtain medical advice.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Governed by other materials present. No special fire-fighting equipment or measures required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Sweep up spillage and recover/recycle if possible. Otherwise place in a fiber keg or paper sack and dispose as industrial waste.

SECTION 7: HANDLING & STORAGE

7.1 Handling | Minimize dust formation.
7.2 Storage | Protect from contamination.
Store in original, unopened package in clean, cool, dry place. Anhydrous material may cake if exposed to moisture.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Regulations | None
8.2 Air contamination limits | None listed
**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>9.1 Form</th>
<th>Powder or granules</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2 Colour</td>
<td>White</td>
</tr>
<tr>
<td>9.3 Odour</td>
<td>None</td>
</tr>
<tr>
<td>9.4 Change in physical state</td>
<td>Anhydrous melts without decomposition above 600°C Hexahydrate decomposes to pyrophosphate and orthophosphate above 100°C</td>
</tr>
<tr>
<td>9.5 Bulk Density</td>
<td>0.5-1.2 g/ml</td>
</tr>
<tr>
<td>9.6 Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>9.7 Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>9.8 Solubility</td>
<td>14.5 g anhydrous salt in 100 ml water at 25°C</td>
</tr>
<tr>
<td>9.9 pH Value</td>
<td>9.8 at 20°C (1% soln.)</td>
</tr>
<tr>
<td>9.10 Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>9.11 Ignition temperature</td>
<td>Does not burn or help other materials to burn</td>
</tr>
<tr>
<td>9.12 Explosion limits</td>
<td>Not relevant</td>
</tr>
</tbody>
</table>

**SECTION 10: STABILITY AND REACTIVITY**

<table>
<thead>
<tr>
<th>10.1 Thermal decomposition</th>
<th>Anhydrous melts without decomposition above 600°C Hexahydrate decomposes to pyro and orthophosphate above 100°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2 Hazardous thermal decomposition products</td>
<td>None</td>
</tr>
<tr>
<td>10.3 Hazardous reactions</td>
<td>None</td>
</tr>
</tbody>
</table>

**SECTION 11: TOXICOLOGICAL INFORMATION**

11.1 The products are not considered to be toxic during the normal course of handling. The food grade STPP has been used as a food additive for many years.
SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecological effects | High pH may affect effluent and sewage treatment processes.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Sweep up spillage and recover/recycle if possible. Otherwise place in a fiber keg or paper sack and dispose as industrial waste.

SECTION 14: TRANSPORT INFORMATION

14.1 Not classified as a substance hazardous for transport.

SECTION 15: REGULATORY INFORMATION

15.1 Mildly alkaline and may cause irritation to the skin, mucous membranes and eyes. Remove dust from the skin by washing with water; in cases of eye contamination, irrigate the eye with flowing water and obtain medical advice if there is persistent irritation. Not classified as hazardous under CPL 1984 regulations.

15.2 Air contamination limits - None established

SECTION 16: OTHER INFORMATION

16.1 This product may be used in the applications like Detergents, Water Treatment, Metal Treatment, Paints, Drilling Muds, Paper Pulping and Ore Flotation etc.

16.2 Food grade material finds applications in seafood processing, curing of hams and bacon, as a binder in comminuted meat products, as a additive for canned meats, a component of cheese emulsifiers, and as a tenderizing agent in the blanching of vegetables prior to freezing.

DISCLAIMER: Every endeavor has been made to ensure that the information contained in this leaflet reliable but we cannot accept liability for any loss, injury or damage which may result from it use. Data given in this Material Safety Data Sheet are solely for guidance in safe handling and use of the product(s) by customers. They do not form part of any specification. Any liability is not acceptable since application of this product is not in our control.