MATERIAL SAFETY DATA SHEET

DISODIUM PHOSPHATE

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Date of Issue: 27/09/03

1.1 Product Details

1.1.1 Product name
1. Disodium Phosphate - Anhydrous
2. Disodium Phosphate – Dihydrate

1.1.2 Chemical name
1. Disodium Phosphate Anhydrous
2. Disodium Phosphate Dihydrate

1.1.3 Chemical formula
1. Na₂HPO₄
2. Na₂HPO₄·2H₂O

1.2 Company
Thai Polyphosphate & Chemicals Co., Ltd.
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

1.3 Emergency Telephone: +66 (0) 2396 1715 - 6, 2748 5173 – 4

SECTION 2: COMPOSITION

2.1 Ingredients
1. Disodium Phosphate Anhydrous (Na₂HPO₄)
2. Disodium Phosphate Dihydrate (Na₂HPO₄·2H₂O)

2.2 CAS Number
7758-70-4 (Anhydrous)
10028-24-7 (Dihydrate)

SECTION 3: HAZARDS

3.1 No known hazards

SECTION 4: FIRST AID MEASURES

4.1 Eye Contact
None required.

4.2 Skin contact
None required.

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. Store one pallet high to avoid compaction.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Regulations
None

8.2 Air contamination limits
None listed

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Form
Non-dusty powder or granules

9.2 Colour
White

9.3 Odour
None

9.4 Change in physical state
Melting point approx. 1000°C (1832°F) after condensation to Tetrasodium Diphosphate.

9.5 Bulk Density
0.6 - 0.8 g/ml

9.6 Vapour pressure
Not applicable

9.7 Viscosity
Not applicable

9.8 Solubility
78g as Na₂HPO₄ in 1 litre of water at 20°C

9.9 pH Value
9.5 at 20°C (1% soln)

9.10 Flash point
Not applicable

9.11 Ignition temperature
Does not burn or help other materials to burn

9.12 Explosion limits
Not relevant
SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>10.1 Thermal decomposition</th>
<th>Loses water, finally forming Tetrasodium Diphosphate</th>
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<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 oral LD50 of the heptahydrate in rats is reported as 12,930 mg/kg (Registry of Toxic Effects of Chemical Substance, April 1983) LD50 values for the products, calculated from this, are:
1. Disodium phosphate - Anhydrous: 6,800 mg/kg
2. Disodium phosphate - Dihydrate: 8,500 mg/kg

Long-term toxic effects are not expected, as the ions formed on dissolving in water are normal constituents of the body. Material of suitable purity is a permitted food additive in the EEC and USA. Excessive levels of dust exposure could lead to coughing and to skin and eye discomfort.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecological effects | May act as a nutrient of precipitate heavy metals.

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 Not classified as a substance hazardous for supply
## SECTION 16: OTHER INFORMATION

16.1 This product may be used in the following applications

<table>
<thead>
<tr>
<th>Application</th>
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<tbody>
<tr>
<td>16.1.1 Emulsifying salt for processed cheese.</td>
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<td>16.1.2 Accelerator in instant pudding mixes.</td>
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<td>16.1.3 Moisture retainer for meat - curing brines.</td>
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<tr>
<td>16.1.4 Reconstituting agent in dehydrated soups.</td>
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<tr>
<td>16.1.5 Corrosion inhibition and water conditioning agent.</td>
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<tr>
<td>16.1.6 pH stabilizer in fabric dyeing process.</td>
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