

## MATERIAL SAFETY DATA SHEET

### DISODIUM PHOSPHATE

#### SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Date of Issue: 27/09/03

Rev-02

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.Na <sub>2</sub> HPO <sub>4</sub> 2.Na <sub>2</sub> HPO <sub>4</sub> .2H <sub>2</sub> O
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: <a href="mailto:mktg@thaipoly.co.th">mktg@thaipoly.co.th</a> Website: <a href="http://www.thaipoly.com">www.thaipoly.com</a>
1.3 Emergency	Telephone: +66 (0) 2396 1715 - 6, 2748 5173 – 4

#### SECTION 2: COMPOSITION

2.1 Ingredients	1.Disodium Phosphate Anhydrous (Na <sub>2</sub> HPO <sub>4</sub> ) 2.Disodium Phosphate Dihydrate (Na <sub>2</sub> HPO <sub>4</sub> .2H <sub>2</sub> O)
2.2 CAS Number	7758-70-4 (Anhydrous) 10028-24-7 (Dihydrate)

#### SECTION 3: HAZARDS

3.1 No known hazards
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#### 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.

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### **SECTION 5: FIRE-FIGHTING MEASURES**

5.1 Governed by other materials present. No special fire-fighting equipment or measures required.
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### **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.
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### **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 Na <sub>2</sub> HPO <sub>4</sub> 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

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### **SECTION 10: STABILITY AND REACTIVITY**

10.1 Thermal decomposition	Loses water, finally forming Tetrasodium Diphosphate
10.2 Hazardous thermal decomposition products	None
10.3 Hazardous reactions	None

### **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 Substances, 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.
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### **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

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### SECTION 16: OTHER INFORMATION

16.1 This product may be used in the following applications
16.1.1 Emulsifying salt for processed cheese.
16.1.2 Accelerator in instant pudding mixes.
16.1.3 Moisture retainer for meat - curing brines.
16.1.4 Reconstituting agent in dehydrated soups.
16.1.5 Corrosion inhibition and water conditioning agent.
16.1.6 pH stabilizer in fabric dyeing process.

*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.*