



PRODUCT DATA SHEET

PRODUCT: Trisodium Phosphate Crystalline (TSPc)
Granular & Fines



GRADE: Technical

CODE: 100 (Granular)
110 (Fines)

GENERAL DESCRIPTION: White, free-flowing, granules or powder.

FORMULA: Na₃PO₄•12(H₂O)•¼NaOH

MOLECULAR WEIGHT: 390.12

CAS NO.: 10101-89-0

DATE EFFECTIVE: May 19, 2006

CHARACTERISTICS

SPECIFICATION LIMITS

Assay, % Na₃PO₄ (ignited basis)

90 Minimum

P₂O₅, % (ignited basis)

18.5 - 21.0

Alkalinity as Na₂O, %

18.0 - 20.5

Total Moisture, %

45 - 57

Sizing, USSS:

Thru 10 Mesh, %

Granular

100 Minimum

Fines

Thru 16 Mesh, %

100 Minimum

Thru 20 Mesh, %

95 Minimum

Thru 100 Mesh, %

10 Maximum

10 Maximum

NOTE: Specification Limits are subject to change from time to time. Please contact us for current data sheet.

Production Location: Lawrence, KS

Packaging: 50 lb. multiwall bags, super sacks; bulk.

Labeling Requirements: Product label required by law.

Shipping Classification: Bagged Shipments: Trisodium Phosphate;
Bulk Shipments: Sodium Phosphate, Tribasic,
ORM-E, NA9148, RQ

Handling Precautions:

DANGER! CAUSES EYE BURNS. CAUSES SKIN IRRITATION. Do not get in eyes, on skin, or clothing. Avoid breathing dust. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Call a physician. IF ON SKIN, immediately flush with plenty of water. Remove contaminated clothing. Wash clothing before reuse.

TRISODIUM PHOSPHATE CRYSTALLINE (TSPc), TECHNICAL GRADE MEDIUM GRANULAR & FINES

Although ICL Performance Products LP Trisodium Phosphate, Crystalline (TSPc) typically contains only 10 molecules of water of hydration (molecular weight of 353.97), it conforms to the general industry standard moisture requirement for Sodium Phosphate, Tribasic Dodecahydrate of 45-57%. Trisodium Phosphate, Crystalline and Trisodium Phosphate, Anhydrous (TSPa) are generally interchangeable in their applications if allowance is made for the differences in contained water. Additionally, TSP Crystalline contains ¼ mole of NaOH per mole of TSP, giving it a slightly higher solution pH.

Key Properties:

- Strongly Alkaline Salt
- Grease Emulsifier
- 24 month Shelf-life
- Buffer Capacity
- Precipitating Agent

Applications:

- **Hard Surface Cleaning** - A wide variety of moderately to heavily soiled surfaces are cleaned with TSP-based formulations. Generally the high solution pH and superior grease and oil emulsifying properties are important. Examples of hard surface cleaning applications are:

Heavy-duty & General Purpose Institutional Cleaners	Auto Metal Parts
Concrete and Garage Floors	Household Products
Pre-paint Cleaners	Scouring Cleansers
- **Water Conditioning** - TSP is an excellent water softening agent due to its ability to precipitate both calcium and magnesium ions. In some industrial applications softening the water at high pH levels is a distinct advantage.
- **Potable Water Treatment**: ICL Performance Products LP trisodium phosphate, crystalline conforms to the requirements of ANSI / NSF Standard 60; used for corrosion & scale control.
Maximum Use Level = 41 mg/L.
- **Textile Applications** - TSP can be used in scouring and bleaching baths to provide high pH and alkalinity as well as removing potential stain producing cations, such as iron, by precipitation. It can also provide pH and buffer capacity to maintain alkaline dye baths in the proper pH range for maximum effectiveness thereby prolonging the life of the bath.
- **Paint Removers** - The alkaline nature of TSP is utilized in formulating paint remover/stripper products. The high alkalinity aids in softening and loosening old paint, facilitating its removal.

FOR MORE COMPLETE INFORMATION ON PROPERTIES AND SAFE HANDLING OF THIS MATERIAL, SEE THE ICL PERFORMANCE PRODUCTS LP MATERIAL SAFETY DATA SHEET (MSDS).

NOTICE: Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, ICL Performance Products LP makes no representations or warranties as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will ICL Performance Products LP be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment or formulation in conflict with any patent, and ICL Performance Products LP makes no representation or warranty, express or implied, that the use thereof will not infringe any patent. The data set forth herein are based on samples tested and are not guaranteed for all samples or applications. Such data are intended as guides and do not reflect product specifications for any particular product. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

ICL PERFORMANCE PRODUCTS LP © May, 2006

Corporate Offices:

622 Emerson Road
Suite 500
St. Louis, Missouri 63141
314-983-7500

For order assistance, please call our Customer Service Department Toll Free: 1-800-244-6169