



RXSOL

CHEMO PHARMA INTERNATIONAL

Technical Data Sheet (TDS)

RXSOL-15-1522-025

TRI SODIUM PHOSPHATE TSP Technical

DESCRIPTION::

Trisodium phosphate (TSP) is an inorganic compound and a salt of sodium and phosphate. TSP is typically found as a white, crystalline solid that is highly soluble in water. It is produced through the reaction of phosphoric acid with sodium hydroxide.

TECHNICAL SPECIFICATION::

- Chemical Formula: Na_3PO_4
- Appearance: White, granular or crystalline solid
- Solubility: Highly soluble in water, producing an alkaline solution
- pH: Around 12-14 in solution
- Purity: Typically 99.1% minimum
- P_2O_5 content: Minimum 18%
- Na content: Minimum 17%
- Iron (Fe) content: Maximum 0.02%
- Chloride (Cl) content: Maximum 0.2%
- Sulphate (SO_4) content: Maximum 0.03%
- Insoluble in water: Maximum 0.05%
- CO_3 content: Maximum 0.40%
- NaOH content: Maximum 2.87%
- Arsenic content: Maximum 0.005%
- Fluoride content: Maximum 0.003%
- Methyl Orange: 16.5-19.0

APPLICATION::

Cleaning and Degreasing:

- Household Cleaning: TSP is effective at removing grease, grime, and stains from surfaces like walls, floors, and kitchen appliances.
- Paint Preparation: It's used as a degreaser and surface cleaner to prepare surfaces for painting or wallpapering, improving paint adhesion.
- Heavy-Duty Cleaning: TSP is a staple in heavy-duty cleaning products for tackling tough stains and residues.
- Mold and Mildew Removal: Its ability to break down organic matter makes it effective at removing mold and mildew stains.

Food Industry:

- Food Additive: TSP is used as a food additive, primarily as an emulsifying agent, pH regulator, and to enhance texture and color in processed foods.
- Preservative: It can act as a preservative, helping to extend the shelf life of certain food products.

PRECAUTION::

Personal Protective Equipment (PPE):

- Gloves: Wear chemical-resistant gloves to prevent skin contact.
- Eye Protection: Use goggles or safety glasses, especially when mixing or handling solutions, to prevent splashes from entering the eyes.
- Respiratory Protection: Consider using a dust mask or respirator when handling dry TSP powder to prevent inhalation of dust particles.
- Clothing: Wear long sleeves and pants to minimize skin exposure.
- Face Protection: Consider a face shield if there's a high risk of splashing.

Handling and Storage:

- Ventilation: Work in a well-ventilated area or use exhaust ventilation to minimize exposure to airborne contaminants.
- Avoid Contact: Prevent contact with skin, eyes, and clothing.
- Spills: Clean up spills immediately using appropriate methods and dispose of waste according to regulations.
- Mixing: Avoid mixing TSP with other chemicals unless specified by the manufacturer's instructions, as this can lead to hazardous reactions or toxic gas release.
- Storage: Store TSP in a well-ventilated place and keep containers tightly closed.
- Hygiene: Wash hands thoroughly after handling TSP and before eating, drinking, or smoking.
- Read Labels: Always read and follow all warnings and instructions on the product's packaging.
- Keep Away from Children: Store TSP out of reach of children.

Trisodium Phosphate cleaning agent, lubricant, food additive, stain remover and degreaser. And also use for preparing smooth surfaces for painting. Trisodium phosphate can also be found as a food additive; it is used as an acidity regulator (buffering agent), emulsifier, thickening agent, nutrition enlargement agent and sequestrant (metal-chelating agent).

Used for softening hard water

Used as an ingredient in detergents

Helps in removing soils and keeping soil from re-depositing

Sodium Phosphate Tribasic TSP is commonly used after cleaning with mineral spirits in order to then clean up all the mineral spirits.

Cleaning products labeled as TSP Sodium Phosphate Tribasic may contain other ingredients as well, and may in fact be less than half TSP. So even "regular" TSP found at the hardware store may be half TSP and half "TSP substitute". Some large home improvement centers that sell paint no longer offer TSP.

TSP may be used with household chlorine bleach in the same solution, and this is particularly good for removing mildew from wood. The TSP alone can cause dark stains on redwood, and bleach prevents it.

It is also used in various forms as a boiler treatment chemical for calcium precipitation, Sodium Phosphate Tribasic is also used to clean swimming pool polyester filter elements.

Our specialization is in prominent Manufacturer and Supplier of Trisodium Phosphates that is widely used in detergents.

Trisodium Phosphates is available in different forms and helps in softening the water and removes the soil content. Available in -

- Crystal form
- Anhydrous form

Used for

- Softening water
- Removing soil
- Preventing soil from re depositing

Widely Used in

- Pharmaceutical industries
- Textile industries
- Food & beverages industries
- Agriculture industries

TSP is a strong base and can cause severe eye damage and can burn unprotected skin.

Wear suitable clothing and eye protection. Keep away from skin and out of gloves.

Any foliage near where TSP is to be used should be soaked with plain water prior to the application of TSP, and rinsed down afterward. Be sure to read and follow all warnings on the product's packaging.

TSP is a very strong cleaner at the dilutions normally used, which vary from 1/2 cup TSP to 2 gal. warm water for "heavy duty cleaning" to 1 cup TSP to 3 quarts warm water for "ridiculously heavy duty cleaning" (source The Savogran Company). For mildew killing, household bleach is added to the TSP/water mixture. The recommended ratio is 1 part household bleach to 4 parts water.

Appearance	Opaque White
Odor	Odorless
Solubility	100%
pH	11.8 (1% Solution @ 25oC)
% Volatiles by volume @ 21C (70F)	0
Boiling Point	1390C(2534F)
Melting Point	318C(604 F)

Vapor Pressure (mm Hg)	Negligible
Evaporation Rate (BuAc = 1)	No information found
Molecular Weight	380.13

Property Description	Specification
Purity, %	99.0 min
Sulphate, %	0.5 max
Insoluble in water, %	0.05 max
P2O5 %	24 min
CO3 %	0.40 max
NaOH %	2.87 max
Arsenic, %	0.0005 max
Iron %	0.01 max
Chloride, %	0.7 max
Fluoride, %	0.003 max
Methyl Orange	16.5-19.0

This Safety Data Sheet is provided by RXSOL. For the most current version of this document, please visit **eastindiachemicals.com**. This document is prepared in accordance with GHS / OSHA HazCom standards. The information contained herein is believed to be accurate but does not purport to be all-inclusive. It is the responsibility of the user to determine the suitability of this information for their application.