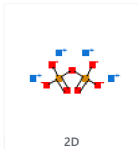






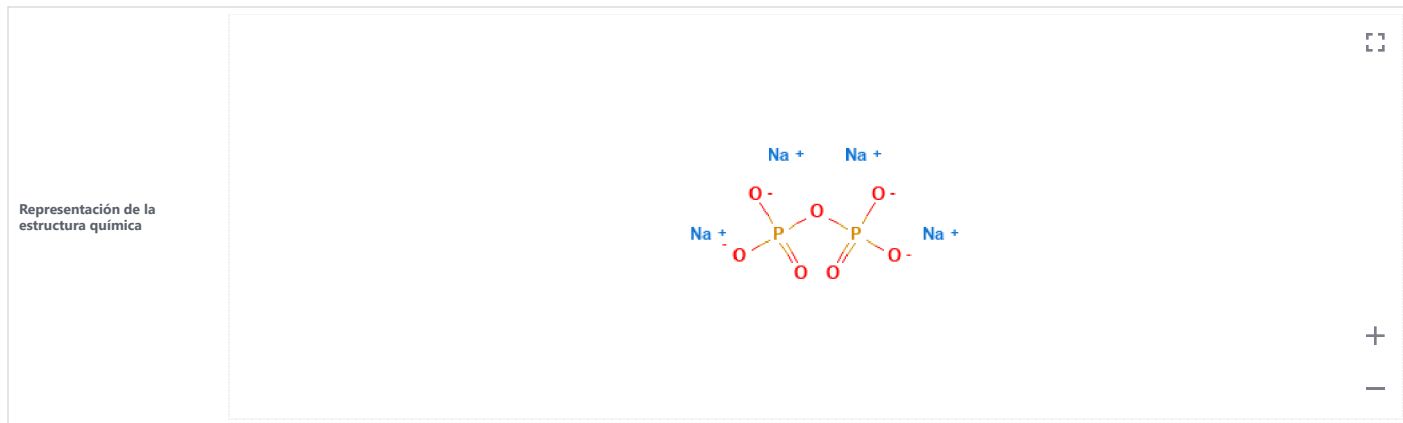
Pirofosfato de tetrasodio

PubChem CID	24403
Estructura	 <p>2D</p> <p>Encuentra estructuras similares</p>
Seguridad química	  <p>Corrosive Irritant</p> <p>Hoja de datos del resumen de seguridad química de laboratorio (LCSS)</p>
Fórmula molecular	<chem>Na4P2O7</chem> o <chem>Na4O7P2</chem>
Sinónimos	<p>Pirofosfato de sodio PYROFOSFATO DE TETRASODIO 7722-88-5 TSP Difosfato de sodio</p> <p>Más...</p>
Peso molecular	265,9 g / mol
Compuestos componentes	<p> CID 1023 (ácido pirofosfórico)</p> <p> CID 5360545 (sodio)</p>
Fecha s	<p>Modificar Crear</p> <p>2021-01-31 2005-08-08</p>
<p>El pirofosfato tetrasódico aparece como un polvo o gránulos blancos e inodoros. pf: 995 ° C. Densidad: 2,53 g / cm³. Solubilidad en agua : 3,16 g / 100 mL (agua fría); 40,26 g / 100 mL de agua hirviendo . Se utiliza como desgrasante de lana, en operaciones de blanqueo, como aditivo alimentario. La sustancia relacionada pirofosfato tetrasódico decahidratado (Na₄P₂O₇ * 10H₂O) se presenta como cristales transparentes incoloros. Pierde su agua cuando se calienta a 93,8 ° C.</p> <p>▶ Químicos CAMEO</p> <p>El difosfato de sodio es una sal de sodio inorgánica compuesta por un anión difosfato (4-) y cuatro cationes de sodio (1+) . Más comúnmente conocido como pirofosfato tetrasódico, encuentra mucho uso en la industria alimentaria como emulsionante y en la higiene dental como sal quelante del calcio . Tiene un papel como emulsionante de alimentos y quelante. Contiene un difosfato (4-) .</p> <p>▶ CHEBI</p>	

1 Estructuras



1.1 Estructura 2D



► PubChem

1.2 Estado 3D



La generación de conformadores no está permitida ya que el elemento, la mezcla o la sal no admitidos del MMFF94

► PubChem

2 Nombres e identificadores



2.1 Descriptores calculados



2.1.1 IUPAC Name



tetrasodium;phosfonato phosphate

Computed by LexiChem 2.6.6 (PubChem release 2019.06.18)

► [PubChem](#)

2.1.2 InChI



InChI=1S/4Na.H4O7P2/c;;;1-8(2,3)7-9(4,5)6/h;;;(H2,1,2,3)(H2,4,5,6)/q4*+1/p-4

Computed by InChI 1.0.5 (PubChem release 2019.06.18)

► [PubChem](#)

2.1.3 InChI Key



FQENQNTWSFEDLI-UHFFFAOYSA-J

Computed by InChI 1.0.5 (PubChem release 2019.06.18)

► [PubChem](#)

2.1.4 Canonical SMILES



[O-]P(=O)([O-])OP(=O)([O-])[O-].[Na+].[Na+].[Na+].[Na+]

Computed by OEChem 2.1.5 (PubChem release 2019.06.18)

► [PubChem](#)

2.2 Molecular Formula



Na4P2O7

► [CAMEO Chemicals](#)

Na4O7P2

► [ILO International Chemical Safety Cards \(ICSC\)](#); [PubChem](#)

2.3 Other Identifiers



2.3.1 CAS



7722-88-5

► [ChemIDplus](#); [EPA Chemicals under the TSCA](#); [EPA DSSTox](#); [European Chemicals Agency \(ECHA\)](#); [Hazardous Substances Data Bank \(HSDB\)](#); [ILO International Chemical Safety Cards \(ICSC\)](#); [The National Institute for Occupational Safety and Health \(NIOSH\)](#)

2.3.2 Related CAS



[10042-91-8](#) (unspecified hydrochloride salt)

[13472-36-1](#) (tetra-hydrochloride salt decahydrate)

[14691-80-6](#) (tri-hydrochloride salt)

[7758-16-9](#) (di-hydrochloride salt)

► [ChemIDplus](#)

2.3.3 Deprecated CAS



156460-73-0, 93269-17-1, 1269628-79-6

► [ChemIDplus](#)

2.3.4 European Community (EC) Number



231-767-1

► [EU Food Improvement Agents](#); [European Chemicals Agency \(ECHA\)](#)

2.3.5 ICSC Number



1140

[▶ ILO International Chemical Safety Cards \(ICSC\)](#)

2.3.6 RTECS Number



UX7350000

[▶ The National Institute for Occupational Safety and Health \(NIOSH\)](#)

2.3.7 UNII



O352864B8Z

[▶ FDA/SPL Indexing Data](#)

2.3.8 DSSTox Substance ID



DTXSID9042465

[▶ EPA DSSTox](#)

2.3.9 Wikipedia



Sodium pyrophosphate

[▶ Wikipedia](#)

2.4 Synonyms



2.4.1 MeSH Entry Terms



anhydrous sodium pyrophosphate
disodium pyrophosphate
sodium diphosphate
sodium pyrophosphate
tetrasodium pyrophosphate
tetrasodium pyrophosphate, 32P2-labeled cpd
tetrasodium pyrophosphate, decahydrate
trisodium pyrophosphate

[▶ MeSH](#)

2.4.2 Depositor-Supplied Synonyms



Sodium pyrophosphate	Sodium pyrophosphate [USAN]	Anhydrous tetrasodium pyrophosphate	tetrasodium phosphonato phosphate	DTXSID9042465	FT-068907:
TETRASODIUM PYROPHOSPHATE	Sodium diphosphate, anhydrous	Tetrasodium pyrophosphate, anhydrous	tetra sodium pyrophosphate	CTK2H7422	X3333
7722-88-5	Natrium pyrophosphat [German]	EINECS 231-767-1	EC 231-767-1	KS-00000WRY	D05873
TSPP	Sodium phosphate (Na4P2O7)	NSC 56751	DSSTox_CID_22465	Tetrasodium pyrophosphate Anhydrous	Q418504
Sodium diphosphate	Sodium pyrophosphate tetrabasic	Pyrophosphoric acid, tetrasodium salt	DSSTox_RID_80032	Sodium pyrophosphate 7722-88-5	
Phosphotex	HSDB 854	Na4P2O7	Sodiumpyrophosphatedecahydrate	CS-B1771	
Tetrasodium diphosphate	MFCD00003513	EPA Pesticide Chemical Code 076405	4Na.O7P2	Tox21_110033	
Diphosphoric acid, tetrasodium salt	Sodium diphosphate (Na4P2O7)	CHEBI:71240	DSSTox_GSID_42465	AKOS015914004	
Victor TSPP	Sodium pyrophosphate, tetrabasic	Tetrasodium pyrophosphate, anhydride	Diphosphoric acid sodium salt	AKOS024418778	
Caswell No. 847	UNII-O352864B8Z	O352864B8Z	Sodium pyrophosphate anhydrous	LS-2429	
Natrium pyrophosphat	Sodium pyrophosphate (Na4P2O7)	Diphosphoric acid, sodium salt (1:4)	KSC37712F	NCGC00013687-01	
Pyrophosphoric acid tetrasodium salt	Tetranatriumpyrophosphat [German]	Sodium pyrophosphate (USAN)	tetrasodium;phosphonato phosphate	CAS-7722-88-5	

[▶ PubChem](#)

3 Chemical and Physical Properties



3.1 Computed Properties



Property Name	Property Value	Reference
Molecular Weight	265.9 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Hydrogen Bond Donor Count	0	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Hydrogen Bond Acceptor Count	7	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Rotatable Bond Count	0	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Exact Mass	265.871003 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Monoisotopic Mass	265.871003 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Topological Polar Surface Area	136 Å ²	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Heavy Atom Count	13	Computed by PubChem
Formal Charge	0	Computed by PubChem
Complexity	124	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Isotope Atom Count	0	Computed by PubChem
Defined Atom Stereocenter Count	0	Computed by PubChem
Undefined Atom Stereocenter Count	0	Computed by PubChem
Defined Bond Stereocenter Count	0	Computed by PubChem
Undefined Bond Stereocenter Count	0	Computed by PubChem
Covalently-Bonded Unit Count	5	Computed by PubChem
Compound Is Canonicalized	Yes	Computed by PubChem (release 2019.01.04)

► [PubChem](#)

3.2 Experimental Properties



3.2.1 Physical Description



Tetrasodium pyrophosphate appears as odorless, white powder or granules. mp: 995°C. Density: 2.53 g/cm³. Solubility in [water](#): 3.16 g/100 mL (cold [water](#)); 40.26 g/100 mL boiling [water](#). Used as a wool de-fatting agent, in bleaching operations, as a food additive. The related substance [tetrasodium pyrophosphate decahydrate](#) (Na₄P₂O₇*10H₂O) occurs as colorless transparent crystals. Loses its [water](#) when heated to 93.8°C.

► [CAMEO Chemicals](#)

DryPowder; DryPowder, PelletsLargeCrystals; PelletsLargeCrystals

► [EPA Chemicals under the TSCA](#)

Colourless or white crystals, or a white crystalline or granular powder. The decahydrate effloresces slightly in dry air

► [EU Food Improvement Agents](#)

ODOURLESS COLOURLESS OR WHITE CRYSTALS OR POWDER.

► [ILO International Chemical Safety Cards \(ICSC\)](#)

Odorless, white powder or granules. [Note: The decahydrate (Na₄P₂O₇ ♦ 10H₂O) is in the form of colorless, transparent crystals.]

► [The National Institute for Occupational Safety and Health \(NIOSH\)](#)

3.2.2 Color/Form



CRYSTALS

Budavari, S. (ed.). The Merck Index - Encyclopedia of Chemicals, Drugs and Biologicals. Rahway, NJ: Merck and Co., Inc., 1989, p. 1455

► [Hazardous Substances Data Bank \(HSDB\)](#)

COLORLESS, TRANSPARENT CRYSTALS OR WHITE POWDER

Lewis, R.J., Sr (Ed.). Hawley's Condensed Chemical Dictionary. 12th ed. New York, NY: Van Nostrand Rheinhold Co., 1993, p. 1067

► [Hazardous Substances Data Bank \(HSDB\)](#)

White powder or granules.

NIOSH. NIOSH Pocket Guide to Chemical Hazards. DHHS (NIOSH) Publication No. 94-116. Washington, D.C.: U.S. Government Printing Office, June 1994., p. 304

► [Hazardous Substances Data Bank \(HSDB\)](#)

3.2.3 Odor



Odorless.

NIOSH. NIOSH Pocket Guide to Chemical Hazards. DHHS (NIOSH) Publication No. 94-116. Washington, D.C.: U.S. Government Printing Office, June 1994., p. 304

► [Hazardous Substances Data Bank \(HSDB\)](#)