



# PRAYPHOS™ TSPF FG

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Issue date: 29/03/2011

Revision date: 19/03/2021

Supersedes version of: 17/10/2019

Version: 3.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Substance
Trade name	: PRAYPHOS™ TSPF FG
Chemical name	: Tetrasodium pyrophosphate
EC Index-No.	: Autoclassification according to CE criteria
EC-No.	: 231-767-1
CAS-No.	: 7722-88-5
REACH registration No	: 01-2119489794-17-0004
Product code	: EUR-0095
Formula	: Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub>
Synonyms	: Sodium pyrophosphate; Tetrasodium diphosphate; E450
Product group	: phosphates

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Food/feedstuff additives

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

PRAYON S.A.  
Rue Joseph Wauters, 144  
B-4480 Engis - Belgique-Belgium  
T +32 (0)4 273 92 11 - F +32 (0)4 273 96 35  
[Reachcustomer@prayon.com](mailto:Reachcustomer@prayon.com) - [www.prayon.be](http://www.prayon.be)

#### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
Ireland	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0870 600 6266 (UK only),
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0344 892 0111

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Dam. 1 H318

Acute Tox. 4 (Oral) H302

Full text of H-statements: see section 16

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H302 - Harmful if swallowed  
H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves, protective clothing, eye protection, face shield.  
P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P330 - If swallowed, rinse mouth  
P264 - Wash hands, forearms and face thoroughly after handling

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : PRAYPHOS™ TSPP FG  
CAS-No. : 7722-88-5  
EC-No. : 231-767-1  
EC Index-No. : Autoclassification according to CE criteria

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tetrasodium pyrophosphate	(CAS-No.) 7722-88-5 (EC-No.) 231-767-1 (REACH-no) 01-2119489794-17	≥ 95	Eye Dam. 1, H318 Acute Tox. 4 (Oral), H302

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air. If feeling unwell, immediately seek medical attention.  
First-aid measures after skin contact : Immediately rinse with plenty of water. Remove contaminated clothing and shoes. Take off contaminated clothing.  
First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Take medical advice immediately.  
First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately. Rinse mouth thoroughly with water.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : May cause severe irreversible damage. (Eyes).

### 4.3. Indication of any immediate medical attention and special treatment needed

See Heading 4.1.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Powders.  
Unsuitable extinguishing media : None.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : On exposure to high temperature, may decompose, releasing toxic gases.

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### 5.3. Advice for firefighters

Protection during firefighting : Tight protective clothing required. Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : In the event that dust and/or fine particles are generated with this product, it is prudent to minimize prolonged inhalation exposure to these forms not to exceed the occupational exposure limit. Avoid dust production. Personal protective equipment (see section (s) :8.2).

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Avoid dust production. Rinse with plenty of water.

### 6.4. Reference to other sections

See section 8 and 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust. Avoid contact with skin, eyes and clothing. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Remove contaminated clothing and shoes. Wash clothing before re-using. Avoid dust production. Container remains hazardous when empty. Continue to observe all precautions.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove contaminated clothing and shoes.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Store in dry, well-ventilated area.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

PRAYPHOS™ TSPP FG (7722-88-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	17,63 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	4,35 mg/m <sup>3</sup>

### 8.2. Exposure controls

#### Appropriate engineering controls:

Good ventilation of the workplace required. Monitor the atmosphere at regular intervals. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. If handling results in dust generation or high temperatures, local exhaust ventilation should be provided to insure that exposure to dust or decomposition products does not exceed the exposure recommended levels. Use as far as possible in a closed system.

#### Hand protection:

Use gloves resistant to chemical products corresponding to EN 374:3". Take advice to gloves' manufacturer ."

#### Eye protection:

Chemical goggles or face shield with safety glasses according to EN 166.

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### Skin and body protection:

Protective clothing (with elasticated cuffs and closed neck)

### Respiratory protection:

Use respiratory protection mask according to EN 140 or EN 405 with filter type P3 according to EN 143:2000 or FFP3 according to EN 149:2001

### Environmental exposure controls:

Do not flush into surface water or sewer system.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Hygroscopic product - Powder.
Molecular mass	: 266 g/mol
Colour	: white.
Odour	: odourless.
Odour threshold	: odourless
pH	: 9,8 – 11 ( @ 1% Solution)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: > 880 °C
Freezing point	: Not applicable - Solid
Boiling point	: Study scientifically not justified ; Melting point> 300°C
Flash point	: Not applicable.(inorganic substance)
Auto-ignition temperature	: Study scientifically not justified ; Melting point> 400°C
Decomposition temperature	: Not applicable
Flammability (solid, gas)	: Study scientifically not justified - Product is stable
Vapour pressure	: Study scientifically not justified ; Melting point> 300°C
Relative vapour density at 20 °C	: Not applicable - Solid
Relative density	: 2,62 @ 22°C
Density	: 0,75 – 1,15 g/cm <sup>3</sup>
Solubility	: Water: 5,6 g/100ml @ 20 °C
Partition coefficient n-octanol/water (Log Pow)	: Technical impossibility to obtain the data - (inorganic substance)
Viscosity, kinematic	: Study scientifically not justified - Solid
Viscosity, dynamic	: Study scientifically not justified - Solid
Explosive properties	: Product is not explosive. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Non oxidizing. There are no chemical groups associated with oxidizing properties.
Explosive limits	: Not applicable - Not explosive Not applicable - Not explosive

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is stable at normal handling and storage conditions.

### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known.

### 10.4. Conditions to avoid

Moisture. Heat.

### 10.5. Incompatible materials

None.

### 10.6. Hazardous decomposition products

None.

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

PRAYPHOS™ TSPP FG (7722-88-5)	
LD50 oral rat	1624 mg/kg bodyweight OECD 420
LD50 dermal rat	> 2000 mg/kg Read-across: Similar substances; OECD Guideline 402 ; EU Method B.3 (Acute Toxicity (Dermal))
LC50 Inhalation - Rat	> 0,58 mg/l Read-across: Similar substances EPA OPP 81-3 ; OECD Guideline 403 ; EU Method B.2

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met. rabbit, Similar to: OECD 404. FMC Non-Definitive Primary Skin Irritation Protocol)

pH: 9,8 – 11 ( @ 1% Solution)

Serious eye damage/irritation : Corrosive. rabbit. OECD 405

pH: 9,8 – 11 ( @ 1% Solution)

Respiratory or skin sensitisation : Not classified (Skin sensitisation. Based on available data, the classification criteria are not met. Read-across: Similar substances. Respiratory sensitisation Not classified. No data available)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met. Read-across: Similar substances)

Carcinogenicity : Not classified (No reference available)

Reproductive toxicity : Not classified (Developmental toxicity: NOAEL(138 mg/kg bw/day - subchronic; rat). Fertility: No data available)

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

PRAYPHOS™ TSPP FG (7722-88-5)	
NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight/day kidneys
NOAEL (dermal, rat/rabbit, 90 days)	No data available
NOAEC (inhalation, rat, gas, 90 days)	No data available

Aspiration hazard : Not classified

PRAYPHOS™ TSPP FG (7722-88-5)	
Viscosity, kinematic	Study scientifically not justified - Solid

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : This product does not present any particular risk for the environment.

PRAYPHOS™ TSPP FG (7722-88-5)	
LC50 - Fish [1]	> 100 mg/l (96h Oncorhynchus mykiss (Rainbow trout), OECD 203)
EC50 Daphnia 1	> 100 mg/l ( 48h - Daphnia magna, EPA OTS 797.1300, OECD 202)
EC50 other aquatic organisms 1	> 1000 mg/l (3h - ACTIVATED SLUDGE, OECD 209)
ErC50 (algae)	> 100 mg/l (72h - Desmodesmus subspicatus (algae), OECD 201)
NOEC chronic fish	100 mg/l
NOEC chronic algae	> 100 mg/l (72h - Desmodesmus subspicatus, OECD 201)
NOEC (additional information)	(3 Hours- 1000 mg/L, ACTIVATED SLUDGE, OECD 209)

#### 12.2. Persistence and degradability

PRAYPHOS™ TSPP FG (7722-88-5)	
Persistence and degradability	Not relevant. (inorganic substance).

#### 12.3. Bioaccumulative potential

PRAYPHOS™ TSPP FG (7722-88-5)	
Partition coefficient n-octanol/water (Log Pow)	Technical impossibility to obtain the data - (inorganic substance)
Bioaccumulative potential	Low bioaccumulation potential.

#### 12.4. Mobility in soil

PRAYPHOS™ TSPP FG (7722-88-5)	
Ecology - soil	Technical impossibility to obtain the data.

#### 12.5. Results of PBT and vPvB assessment

PRAYPHOS™ TSPP FG (7722-88-5)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	

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### PRAYPHOS™ TSPP FG (7722-88-5)

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### Component

Tetrasodium pyrophosphate (7722-88-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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#### 12.6. Other adverse effects

Other adverse effects : No.  
Additional information : Phosphates are plant nutrient and as such may contribute to the growth of phytoplanktons in water.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Comply with local regulations for disposal.  
Additional information : Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.  
Ecology - waste materials : See the european waste catalogue.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable  
Proper Shipping Name (IMDG) : Not applicable  
Proper Shipping Name (IATA) : Not applicable  
Proper Shipping Name (ADN) : Not applicable  
Proper Shipping Name (RID) : Not applicable

#### 14.3. Transport hazard class(es)

##### ADR

Transport hazard class(es) (ADR) : Not applicable

##### IMDG

Transport hazard class(es) (IMDG) : Not applicable

##### IATA

Transport hazard class(es) (IATA) : Not applicable

##### ADN

Transport hazard class(es) (ADN) : Not applicable

##### RID

Transport hazard class(es) (RID) : Not applicable

#### 14.4. Packing group

Packing group (ADR) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable  
Packing group (ADN) : Not applicable  
Packing group (RID) : Not applicable

#### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

#### 14.6. Special precautions for user

##### - Overland transport

No data available

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### - Transport by sea

No data available

### - Air transport

No data available

### - Inland waterway transport

Carriage prohibited (ADN) : No

Not subject to ADN : No

### - Rail transport

Carriage prohibited (RID) : No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

PRAYPHOS™ TSPP FG is not on the REACH Candidate List

PRAYPHOS™ TSPP FG is not on the REACH Annex XIV List

Other information, restriction and prohibition regulations : Not required.

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

Indication of changes:

	Revision date	Modified	
	Supersedes	Modified	
	Carcinogenicity - comment	Modified	
9.1	Lower explosive limit (LEL)	Added	
9.1	Upper explosive limit (UEL)	Added	
9.1	Viscosity, dynamic	Added	
9.1	Appearance	Added	
9.1	Odour threshold [ppm]	Added	
9.1	Molecular mass	Added	
9.1	Relative density	Added	
9.1	Freezing point	Added	
9.1	Physical state	Modified	
9.1	Oxidising properties	Modified	
9.1	Explosive properties	Modified	
9.1	Flammability (solid, gas)	Modified	
9.1	Vapour pressure	Modified	
9.1	Relative vapour density at 20 °C	Modified	
9.1	Decomposition temperature	Modified	
9.1	Auto-ignition temperature	Modified	
9.1	Viscosity, kinematic	Modified	
9.1	Solubility in water	Modified	
9.1	Melting point	Modified	
9.1	Flash point	Modified	

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9.1	Density	Modified	
9.1	pH	Modified	
11.1	LC50 Inhalation - Rat	Modified	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	NOAEL (oral, rat, 90 days)	Added	
11.1	NOAEC (inhalation, rat, gas, 90 days)	Added	
11.1	NOAEL (dermal, rat/rabbit, 90 days)	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	LD50 dermal rat	Modified	
12.1	EC50 other aquatic organisms 1	Modified	
12.1	LC50 - Fish [1]	Modified	
12.4	Ecology - soil	Modified	

### Abbreviations and acronyms:

	<p>ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways ADR: European Agreement concerning international carriage of Dangerous goods by Road AF : Assessment factor BCF : Bioconcentration factor Bw: Body weight CAS: Chemical Abstracts Service CLP : Classification, labelling, packaging CSR: Chemical Safety Report DMEL : Derived maximum effect level DNEL: Derivative No effect Level EC: European Community ELV : Emission limit values EN: European Norm EUH: European Hazard Statement EWC : European Waste catalogue IATA: International Air Transport Association ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods LC50: Median lethal concentration LD50 : Median lethal dose NOAEL : No-observed-adverse-effect-level NOEC : No observed effect concentration NOEL : No observed effect level OEL : Operator exposure level PBT: Persistent, bioaccumulative, Toxic PEC : Predicted effect level PNEC: Predicted No effect Concentration REACH : Registration, evaluation and autorisation of chemicals RID: Regulations concerning the international carriage of dangerous goods by rail STEL: Short Term Exposure Limit TWA : Time weighted average vPvB: Very persistent, very bioaccumulative</p>
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Data sources : Reach dossier.

Training advice : None.

### Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed
H318	Causes serious eye damage.



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