



# SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2020  
Date Updated: November 27, 2020

## SECTION 1. ----- PRODUCT AND COMPANY IDENTIFICATION -----

**Product Name** Sodium phosphate dibasic  
**Product Code(s)** S0404  
**Recommended Use** For Laboratory Research Use Only  
Not for Human or Animal Drug Use

**Supplier** Bio Basic Inc.  
**Address** 20 Konrad Crescent, Markham, Ontario,  
Canada, L3R 8T4  
**Telephone** (905) 474 4493  
**Fax** (905) 474 5794  
**For Chemical Emergency Phone#** (416) 995 9730

## SECTION 2. ----- HAZARDS IDENTIFICATION -----

### Classification of the substance or mixture

Not a hazardous substance or mixture.

### GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

### Hazards not otherwise classified (HNOC) or not covered by GHS

- none

## SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	CAS-No	Weight %
Sodium phosphate dibasic	231-448-7	7558-79-4	<100

## SECTION 4. ----- FIRST-AID MEASURES -----

### If inhaled

After inhalation: fresh air.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

### If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

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

No data available

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

### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Special hazards arising from the substance or mixture**

Oxides of phosphorus, Sodium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

### **Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.

### **Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -**

### **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### **Environmental precautions**

Do not let product enter drains.

### **Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### **Reference to other sections**

For disposal see section 13.

## **SECTION 7. - - - - - HANDLING AND STORAGE- - - - -**

### **Precautions for safe handling**

For precautions see section 2.

### **Conditions for safe storage, including any incompatibilities**

Tightly closed. Dry.

Hygroscopic. Keep in a dry place.

Storage class (TRGS 510): 11: Combustible Solids

### **Specific end use(s)**

Apart from the uses mentioned in section 1 no other specific uses are stipulated

## **SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -**

### **Exposure controls**

#### **Appropriate engineering controls**

Change contaminated clothing. Wash hands after working with substance.

#### **Personal protective equipment**

##### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

##### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are

desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

**SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----**

**Information on basic physical and chemical properties**

- |   |   |
|---|---|
| a) Appearance                                   | Form: granules<br>Color: white  |
| b) Odor   | odorless  |
| c) Odor Threshold                               | Not applicable  |
| d) pH   | 8.9 - 9.2 at 50 g/l at 25 °C (77 °F)  |
| e) Melting point/freezing point                 | Melting point/range: > 450 °C (> 842 °F) - Regulation (EC) No. 440/2008, Annex, A.1 |
| f) Initial boiling point and boiling range      | No data available   |
| g) Flash point                                  | ( )Not applicable   |
| h) Evaporation rate                             | No data available   |
| i) Flammability (solid, gas)                    | No data available   |
| j) Upper/lower flammability or explosive limits | No data available   |
| k) Vapor pressure                               | No data available   |
| l) Vapor density                                | No data available   |
| m) Relative density                             | No data available   |
| n) Water solubility                             | completely soluble  |
| o) Partition coefficient: octanol/water         | Not applicable for inorganic substances n-  |
| p) Autoignition temperature                     | No data available   |
| q) Decomposition temperature                    | No data available   |
| r) Viscosity                                    | No data available   |
| s) Explosive properties                         | No data available   |
| t) Oxidizing properties                         | No data available   |

**Other safety information**

Dissociation constant 6.87 at 20.4 °C (68.7 °F) - OECD Test Guideline 112

**SECTION 10. -----STABILITY AND REACTIVITY -----**

**10.1 Reactivity**

No data available

**Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) . Stable under recommended storage conditions.

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

Exposure to moisture. no information available

**Incompatible materials**

Strong oxidizing agents, Strong acids

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Oxides of phosphorus, Sodium oxides  
Other decomposition products - No data available In the event of fire: see section 5

**SECTION 11. ----- TOXICOLOGICAL INFORMATION -----****Acute toxicity**

LD50 Oral - Rat - female - > 2,000 mg/kg (OECD Test Guideline 420)

LC50 Inhalation - Rat - male and female - 4 h - > 0.83 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

No data available

**Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation - 24 h (OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation - 30 s (OECD Test Guideline 405)

**Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse Result: negative  
(OECD Test Guideline 429)

**Germ cell mutagenicity**

Micronucleus test Human lymphocytes Result: negative

In vitro mammalian cell gene mutation test mouse lymphoma cells

Result: negative  
(ECHA)

Chromosome aberration test in vitro Human lymphocytes  
Result: negative

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: WC4500000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

However, when the product is handled appropriately, hazardous effects are unlikely to occur. Handle in accordance with good industrial hygiene and safety practice.

**SECTION 12. ----- ECOLOGICAL INFORMATION -----**

**Toxicity**

Toxicity to fish                      semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h  
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates                      static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h  
(OECD Test Guideline 202)

Toxicity to algae                      static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h  
(OECD Test Guideline 201)

Toxicity to bacteria                      static test EC50 - activated sludge - > 1,000 mg/l - 3 h  
(OECD Test Guideline 209)

**Persistence and degradability**

The methods for determining biodegradability are not applicable to inorganic substances.

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

Discharge into the environment must be avoided.

**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14. ----- TRANSPORT INFORMATION -----**

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**SECTION 15. ----- REGULATORY INFORMATION -----**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

**SECTION 16. ----- OTHER INFORMATION -----**

Further information: no limited for paper copy, just for internal uses.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**Issuing Date:** 27-Nov-2020

**End of SDS**



Bio Basic Inc.

A world leader in serving science

## CERTIFICATE OF ANALYSIS

Product	Sodium phosphate, dibasic, anhydrous
Grade	ACS
Product Code	S0404(SC8120)
Formula	$\text{Na}_2\text{HPO}_4$
MW	141.96
CAS#	7558-79-4
Lot No	

Test Items	Specifications	Results
Appearance	White powder	
Purity	$\geq 99\%$	
Insoluble matter	$< 0.01\%$	
Loss on dry at $105^\circ\text{C}$	$< 0.2\%$	
pH (5% in water, at $25^\circ\text{C}$ )	8.7~9.3	
Chloride (Cl)	$< 0.002\%$	
Sulfate ( $\text{SO}_4$ )	$< 0.005\%$	
Heavy metals (as Pb)	$< 0.001\%$	
Iron (Fe)	$< 0.002\%$	
Nitrogen Compounds (as N)	$< 0.002\%$	

Storage: R.T.

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