



MATERIAL SAFETY DATA SHEET
IONIFOSS

1. IDENTIFICATION OF THE SUBSTANCE, PRODUCT AND PRODUCER

1.1 Product identifier

Trade name : **IONIFOSS**

Chemical name : REACTION PRODUCT OF POTASSIUM HYDROXIDE AND PHOSPHOROUS ACID- EC Number : 923-751-4

1.2 Use of the substance/formulation and uses advised:

Fertilizer-EC fertilizer/PK fertilizer solution 30-20

Uses to be avoided: **No one**

1.3 Identification of the producer: CIFO SPA- Via Oradour 6/8-San Giorgio di Piano (Bologna)-Italy- E-mail: info@cifo.it- Web site : www.cifo.it

E-mail address of the person in charge of the drafting of the safety data sheet : info@cifo.it

1.4 Emergency tel.nr.: **CIFO SPA - Tel. nr. 051-6655511**

Poison Centre : (24 hours)+39/382/24444

2. IDENTIFICATION OF THE HAZARDS

2.1 Classification of the substance or mixture :

Standards according to EC regulations 67/548,99/45 and its amendments:

Properties/symbols:



Xi Irritating

R phrases : R36 : Irritating to eyes.

Standards according to EC regulation 1272/2008 (CLP) :

Classification:



Eye irrit.2;Attention, H319 : Causes serious eye irritation

Additional physical/chemical damages to human health or environment:

No additional risk.

2.2 Label elements:

According to regulation 1272 (2008) (CLP)

Pictogram:



Hazard:

H319 : Causes serious eye irritation

Warning

P102 Keep out of reach of children

P264 Wash skin and eyes thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P280 Wear protective gloves/protective clothing/eye protection/face protection



P302/352 - IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing

P337+P313: If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/container according to national regulation.

Special warnings:No

2.3 Other dangers:

PBT/vPvB Criteria : following Annex XII of EC regulation 1907/2006, no assessment was carried out as the mixture is composed only of inorganic substances

Other dangers : No other danger

3. COMPOSITION/INFORMATION ON COMPONENTS

3.1 Substances: not applicable

According to REACH regulation the product is multi-components.

Chemical name : Potassium phosphite

CAS : 13492-26-7

EC :236809-2

Iupac name : Dipotassium phosphonate

Pureness : Value between 20% and 80%

Chemical name : Monopotassium phosphite

CAS : 13977-65-6

EC :604-162-9

Iupac name : Phosphonic acid acid, potassium salt

Pureness : Value between 20% and 80%

4. FIRST AID MEASURES:

4.1 Description of first aid measures

In the event of contact with skin: Wash immediately and abundantly with water and soap for at least 15 minutes. Wash body completely (shower/bath). Immediately take off the contaminated clothes and dispose them in a safe way. If irritation persists and increases, seek medical advice/attention.

In the event of contact with eyes: Wash immediately and abundantly with running water for at least 15 minutes, keeping eyelids open then see an ophthalmologist. Remove contact lenses if easy to do. Protect the uninjured eye.

In the event of swallowing: SEEK MEDICAL ATTENTION in case of sickness. Wash mouth with abundant water and drink water. Do not force a person who is unconscious to drink. CONSULT A DOCTOR IF SYMPTOMS LAST.

In the event of exposure to inhalation: Remove victim to fresh air (in case of dizziness, somnolence or respiratory tract irritation). If breathing is difficult or absent, give artificial respiration. Do not give mouth to mouth resuscitation. SEEK IMMEDIATELY MEDICAL ATTENTION in case great quantity of fumes inhaled.



Pag.3 MATERIAL SAFETY DATA SHEET IONIFOSS

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

Acute effects : Eye irritation

Delayed effects : No data available

4.3 Indication of any immediate medical attention and special treatment

In case of accident or if you feel unwell, seek immediately medical attention (if possible show instruction for use or MSDS).

5. FIREFIGHTING MEASURES

5.1 Extinguishing media :

Suitable methods of extinction : water, foam

Unsuitable methods of extinction : None in particular

5.2 Special hazards arising from the substance or mixture: Avoid inhalation of fumes developed by explosion or combustion.

5.3 Advice for firefighters :Use suitable breathing apparatus and chemical protection overalls. Collect water used to extinguish the fire in a separate way. Do not discharge into the sewers. If possible, following safety instructions, move the undamaged containers from the immediate hazard area.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment to avoid skin, eye, and personal clothing contamination. Evacuate all personnel from the danger area and consult trained operators. Displace people to a safe area. Consult safety measures listed under headings 7 and 8. Eliminate any ignition source, ventilate the area, keep dusts under control.

6.2 Environmental precautions : Prevent leaks to the soil/subsoil. Prevent any material from entering drains or waterways. Collect the water used to clean the contaminated area and dispose it. In the event of gas escape or leakages in water courses/soil or drains, inform competent Authorities.

6.3 Methods and material for containment and cleaning up

Wash with plenty of water. For collection or disposal, Hoover the floor or clean it and store in suitable containers with labels.

Suitable material for collection: sawdust or similar suitable material. Avoid dust from forming.

6.4 Reference to other sections : See headings 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling: Avoid contact with skin, eyes and vapour/mists inhalation. Provide suitable ventilation. Avoid any type of contamination, including metals, powders and organic materials. Do not use empty containers before cleaning them in advance. Before using any containers, check eventual presence of non compatible materials. Take off contaminated clothing before eating. During use, do not eat, drink or smoke. Wash hands after use. Refer also to heading 8 for personal protection measures.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from food, drinks or feedingstuffs. Store in the original container. Wash hands after use.



Keep the container tightly closed in a dry, well-ventilated area. Keep away from heat sources, sparks, flames and other ignition sources, direct sun light, flammable materials or reducing ones and other incompatible materials.

Packing materials: Stainless iron (304), synthetic material

Material unsuitable for packing: Zinc, copper.

Storage areas: Well-ventilated places.

Incompatible materials: Strongly reducing and oxidizing agents, acids or strong bases.

7.3 Specific end uses : Fertiliser

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits: No one.

Exposure values for the main components:

Exposure type	LOAEL (lowest level with adverse effects)
Oral	LD50 > 2000 mg/Kg bw
Skin	LD50 > 5050 mg/Kg bw
Inhalation	LC50>2.02 mg/L

8.2 Exposure controls

Suitable technical controls : No technical instrument is required. Provide an adequate ventilation, eyewash station and safety shower in storage area or where the product is handled.

Personal protection measures, such as personal protective equipment

Eye/face protection : Use safety goggles for chemicals, protection mask.

Skin protection : Gloves. Wear suitable overall protective clothing for complete skin protection.

Respiratory protection: Protect the respiratory tract with suitable dust mask.

Heating dangers: Not applicable for normal use.

Controls for environmental exposure : Work in accordance with national regulations. Follow standard hygiene rules: wash hands, arms and face in case of contact with chemical products, before smoking, eating and drinking, wash after work. Take off the contaminated clothes with greatest care; wash the contaminated clothes before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: colorless liquid.

Smell: odorless

PH : 5-6

Melting point: No available data.

Boiling point : 105,5°C.

Relative density: 1,3-1,4

Solubility: Water miscible.

Liposolubility: No available data.

Octanol /water partition coefficient: Not soluble in octanol

Solubility in organic solvents : not miscible

Stability : Not stable with metals and metallic ions (iron powder, iron chloride, lead nitrate)



9.2 Other information

No available data

10. STABILITY AND REACTIVITY

10.1 Reactivity : Stable in recommended storage and handling conditions.

10.2 Chemical stability : Stable in normal temperature and pressure conditions established for storage and handling.

10.3 Possibility of hazardous reactions : Not known

10.4 Conditions to avoid: Avoid exposure to heat, sparks, flames or other ignition sources, direct sun light and weather conditions. Follow instructions in section 7 (handling and storage)

10.5 Incompatible materials

Strong oxidizing and reducing agents, acids and strong bases, powder metals.

10.6 Hazardous decomposition products:

At normal storage conditions no dangerous decomposition byproducts develop.

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects:**

Oral acute toxicity : LD50 > 2000 mg/kg

Skin acute toxicity : LD50 > 5050 mg/kg.

Breathing acute toxicity: LC50 > 2,2 mg/l

Irritating to skin: not irritating.

Irritating to eyes: slightly irritating

Skin/respiratory sensitization: none

In vitro genotoxic effects: no mutagenic effects.

Teratogenic effects: negative

Toxicity for reproduction: negative

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

Fish (short term) : no available data

Fish (long term) : no available data

Daphnia magna (short term) : no available data

Daphnia magna (long term) : no available data

Seaweed : no available data

12.2 Persistence and degradability: Being the substance inorganic, it's not possible to test it.

12.3 Bioaccumulation potential

Octanol /water partition coefficient: Not soluble in octanol

12.4 Mobility in soil: No available data

12.5 PTB and vPvB evaluation results: following Annex XII of EC

regulation 1907/2006, no assessment was carried out as the mixture is composed only of inorganic substances.

12.6 Other effects : No one

13. NOTES ABOUT DISPOSAL**13.1 Waste treatment methods**

Collect if possible. Send for disposal only to special plants authorized to dispose dangerous materials or to plants for incineration in controlled conditions Act in accordance with current local and national regulations.

When applicable, refer to following: EEC regulation N°91/156, 91/689, 94/62 Decree by the President of the Republic 24 May 1998 n. 203, Decrees by Law n. 22/97, 152/06, 152/99 and following amendments,



PAG.6 MATERIAL SAFETY DATA SHEET IONIFOSS

integrations and adjustments. Clean containers before disposing them as waste, according to national regulations. Do not remove the label before having cleaned it properly.

14. INFORMATION FOR THE TRANSPORT

The product is not dangerous for the transport

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: Decree by Law 3/2/1997 n.52

(Classification, packaging and labelling of dangerous substances). Decree by Law 14/3/2003 n.65 (Classification, packaging and labelling of dangerous substances). Decree by Law 2/2/2002 n.25 (Risks resulting from working exposure to chemical agents). Labour Minister's decree 26/02/2004 (Professional exposure limits). Ministry Decree 03/04/2007 (Implementation of the Directive n° 2006/8/EC). EC regulation n.1907/2006 (REACH). EC Regulation n°1272/2008 (CLP), EC Regulation n°790/2009.

Refer to the following regulations, when applicable:

Ministerial memorandums n.46 and 61 (Aromatic amines).

Decree by Law 21st September 2005 n.238 (Seveso Ter directive)

Cleaner regulation 648/2004 and 901/06 and further amendments and additions. Decree 16th January 2004 n.44 (COV directive). Residues of plant protection products regulation and further amendments and additions ATEX (Title VIII-Bis; Decree by Law 626/94- Decree by the President of the Republic 23/03/1998-n.126)

Decree 16th January 2004 n.44 (COV directive). ATEX (Title VIII-Bis; Decree by Law 626/94- Decree by the President of the Republic 23/03/1998-n.126)

Aerosols regulation: EC directive 75/324, Decree by the President of the Republic n.741 of 21/07/1982 and further amendments and additions Fertilisers law, Decree by Law 75/2010 and Reg.2003/2003.

Cosmetics regulation 713/86 and further amendments and additions.

Plant protection products regulation 194/95, circular n. 7/99, Decree by the President of the Republic 290/01, EC Reg.91/414 and further amendments and additions.

Biocide EC regulation 98/8 and further amendments and additions.

15.2 Chemical safety assessment :No data available

16. OTHER INFORMATION

According to EC Regulation 1907/2006 (REACH) and further amendments and additions

Main bibliographical sources:

ECDIN - Environmental Chemicals Data and Information Network- Joint Research Centre, Commission of European Communities.

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold.

ACGIH- Treshold Limit Values - 2004 edition.

Above-mentioned information are based on our knowledge on 07/02/2011. They only refer to this product and must not be considered a guarantee of particular qualities.

The user must make sure of suitability and completeness of these information in relation to the specific use of the product.

This sheet cancels and replaces any previous edition.
