

# Safety data sheet

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BASF Safety data sheet  
Date / Revised: 15.06.2022  
Product: **Herbadox® 330 EC**

Version: 3.0

(30743108/SDS\_CPA\_PH/EN)

Date of print): 05.05.2023

## 1. Substance/preparation and manufacturer/supplier identification

**Product name:**  
**Herbadox® 330 EC**

Use: crop protection product, herbicide

Manufacturer/supplier:

BASF Philippines, Inc.  
Upper Penthouse CTP ASEAN Tower  
Asean Drive, Spectrum District  
Filinvest Corporate City, Alabang,  
Muntinlupa City, 1781, Metro Manila  
PHILIPPINES  
Telephone: +63 2 8811-8000  
E-mail address: psr.ph@basf.com

Emergency information:

National emergency number:  
+63 2 8831 5576  
International emergency number:  
Telephone: +49 180 2273-112

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## 2. Hazard identification

Classification of the substance and mixture:

Aspiration hazard: Cat.1

Flammable liquids: Cat.3

Acute toxicity: Cat.5 (oral)

Serious eye damage/eye irritation: Cat.1

Specific target organ toxicity — single exposure: Cat.3 (irritating to respiratory system)

Specific target organ toxicity — repeated exposure: Cat.2

Hazardous to the aquatic environment - acute: Cat.1

Hazardous to the aquatic environment - chronic: Cat.1

Label elements and precautionary statement:

Pictogram:



Signal Word:

Danger

Hazard Statement:

H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye protection or face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/gas/mist/vapours.
P243	Take action to prevent static discharges.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P240	Ground and bond container and receiving equipment.
P242	Use only non-sparking tools.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353	IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or shower.
P391	Collect spillage.
P331	Do NOT induce vomiting.
P370 + P378	In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.

Precautionary Statements (Storage):

P233	Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Precautionary Statements (Disposal):

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P501 Dispose of contents and container to hazardous or special waste collection point.

Other hazards which do not result in classification:

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

May produce an allergic reaction. Contains: pendimethalin

### 3. Composition/information on ingredients

#### Chemical nature

Substance nature: mixture

crop protection product, herbicide, Emulsifiable concentrate (EC)

#### Hazardous ingredients

pendimethalin

Content (W/W): 33.85 %  
 CAS Number: 40487-42-1

Acute Tox.: Cat. 5 (oral)  
 Skin Sens.: Cat. 1B  
 Aquatic Acute: Cat. 1  
 Aquatic Chronic: Cat. 1  
 M-factor acute: 100  
 M-factor chronic: 10

xylene

Content (W/W): < 60 %  
 CAS Number: 1330-20-7

Asp. Tox.: Cat. 1  
 Flam. Liq.: Cat. 3  
 Acute Tox.: Cat. 5 (Inhalation - vapour)  
 Acute Tox.: Cat. 5 (oral)  
 Skin Corr./Irrit.: Cat. 2  
 Eye Dam./Irrit.: Cat. 2B  
 STOT SE: Cat. 3 (irr. to respiratory syst.)  
 STOT RE (Central nervous system, Liver, Kidney): Cat. 2  
 Aquatic Acute: Cat. 2  
 Aquatic Chronic: Cat. 3

| Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts

Content (W/W): < 5 %  
 CAS Number: 90194-26-6

Skin Corr./Irrit.: Cat. 2  
 Eye Dam./Irrit.: Cat. 1  
 Aquatic Chronic: Cat. 3

| (OLIGOMER) 4-Nonylphenol, branched, ethoxylated (> 1 < 2.5 mol EO)

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Content (W/W): < 3 %  
CAS Number: 127087-87-0

Acute Tox.: Cat. 4 (oral)  
Eye Dam./Irrit.: Cat. 2B  
Aquatic Acute: Cat. 3  
Aquatic Chronic: Cat. 3

| methanol

Content (W/W): < 1 %  
CAS Number: 67-56-1

Flam. Liq.: Cat. 2  
Acute Tox.: Cat. 3 (Inhalation - vapour)  
Acute Tox.: Cat. 3 (oral)  
Acute Tox.: Cat. 3 (dermal)  
STOT SE (Central nervous system, Optic nerve): Cat. 1

#### 4. First-Aid Measures

##### General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

##### If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

##### On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

##### On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

##### On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting due to aspiration hazard.

##### Note to physician:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

#### 5. Fire-Fighting Measures

##### Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

##### Specific hazards:

carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides

The substances/groups of substances mentioned can be released in case of fire.

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Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

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## 6. Accidental Release Measures

Personal precautions:

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

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## 7. Handling and Storage

### Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 24 Months

Protect from temperatures below: 5 °C

The product can crystallize below the limit temperature.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

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## 8. Exposure controls and personal protection

### Components with occupational exposure limits

xylene, 1330-20-7;

TWA value 100 ppm (ACGIHTLV)

STEL value 150 ppm (ACGIHTLV)

TWA value 0.1 mg/m<sup>3</sup> (OEL (PH))

(OEL (PH))

Included in the regulation, but with no data values - See the regulation for further details

### Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

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## 9. Physical and Chemical Properties

Form: liquid  
Colour: red-brown  
Odour: aromatic, of the solvent contained in the product  
Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 5 - 7  
(CIPAC standard water D, 1 %(m),  
approx. 20 °C)

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crystallization range:	< -5 °C	
Boiling range:	approx. 137 - 140 °C	
	Information applies to the solvent.	
Flash point:	32 °C	
Evaporation rate:	not applicable	
Flammability (solid/gas):	not applicable	
Lower explosion limit:	1 %(V)	
Upper explosion limit:	7 %(V)	
Ignition temperature:	approx. 375 °C	(Regulation 440/2008/EC, A.15)
Thermal decomposition:	210 - 320 °C , 820 kJ/kg	(DSC (OECD 113))
	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
SADT:	> 75 °C	
Explosion hazard:	not explosive	(Regulation 440/2008/EC, A.14)
Fire promoting properties:	not fire-propagating	(Regulation 440/2008/EC, A.21)
Vapour pressure:	approx. 10.6 hPa (25 °C)	
	Information applies to the solvent.	
Density:	approx. 0.97 g/cm <sup>3</sup> (20 °C)	
Relative vapour density (air):	not applicable	
Solubility in water:	emulsifiable	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Viscosity, dynamic:	approx. 0.74 mPa.s (25 °C)	
	Information applies to the solvent.	
Viscosity, kinematic:	approx. 1 mm <sup>2</sup> /s (40 °C)	

#### Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

## 10. Stability and Reactivity

#### Conditions to avoid:

See SDS section 7 - Handling and storage.

Thermal decomposition: 210 - 320 °C, 820 kJ/kg (DSC (OECD 113))

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Thermal decomposition: Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Substances to avoid:  
strong oxidizing agents, strong bases, strong acids

Hazardous reactions:  
No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemical stability:  
The product is stable if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

### Routes of exposure

#### Acute oral toxicity

Experimental/calculated data:  
LD50rat (oral): 2,681 mg/kg

#### Acute inhalation toxicity

LC50 rat (by inhalation): > 9.38 mg/l 4 h  
An aerosol was tested.

#### Acute dermal toxicity

LD50 rat (dermal): > 2,000 mg/kg  
No mortality was observed.

#### Assessment of acute toxicity

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Of low toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

#### Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.  
(Further) symptoms and / or effects are not known so far

#### Irritation

Assessment of irritating effects:  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

May cause severe damage to the eyes. Not irritating to the skin.

Experimental/calculated data:  
Skin corrosion/irritation rabbit:

Serious eye damage/irritation rabbit:



## Respiratory/Skin sensitization

Assessment of sensitization:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Draize test human:

## Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

## Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: pendimethalin

Assessment of carcinogenicity:

In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

Information on: methanol

Assessment of carcinogenicity:

In long-term studies in rats and mice in which the substance was given by inhalation, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given in the drinking water in high concentrations, a carcinogenic effect was observed. These effects are not relevant to humans at occupational levels of exposure.

## Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

## Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

## Specific target organ toxicity (single exposure)

Causes temporary irritation of the respiratory tract.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

### **Repeated dose toxicity and Specific target organ toxicity (repeated exposure)**

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: xylene

Assessment of repeated dose toxicity:

Repeated exposure may affect certain organs. Damages the central nerve system. The substance can cause changes in the following organs after repeated exposure to large quantities: Liver Kidney

Information on: pendimethalin

Assessment of repeated dose toxicity:

No substance-specific organotoxicity was observed after repeated administration to animals. Adaptive effects were observed after repeated exposure in animal studies.

Information on: methanol

Assessment of repeated dose toxicity:

The substance may cause blindness after repeated ingestion. The substance may cause blindness after repeated inhalation.

### **Aspiration hazard**

The product has not been tested. The statement has been derived from the properties of the individual components.

### **Other relevant toxicity information**

Misuse can be harmful to health.

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## **12. Ecological Information**

### **Ecotoxicity**

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: pendimethalin

Toxicity to fish:

LC50 (96 h) 0.196 mg/l, *Oncorhynchus mykiss*

Information on: pendimethalin

Aquatic invertebrates:

EC50 (48 h) 0.147 mg/l, *Daphnia magna*

Information on: pendimethalin

Aquatic plants:

EC50 (7 d) 0.012 mg/l, Lemna gibba

EC10 (7 d) 0.0029 mg/l, Lemna gibba

No observed effect concentration (7 d) 0.003 mg/l, Lemna gibba

| EC50 (72 h) 0.0093 mg/l, Selenastrum capricornutum

EC10 (72 h) 0.0028 mg/l, Selenastrum capricornutum

Information on: pendimethalin

Chronic toxicity to fish:

| No observed effect concentration (179 d) 0.02 mg/l, Brachydanio rerio (semistatic)

No observed effect concentration (288 d) 0.006 mg/l, Pimephales promelas

Information on: pendimethalin

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), 0.0145 mg/l, Daphnia magna

## Mobility

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: pendimethalin

Assessment transport between environmental compartments:

The substance will slowly evaporate into the atmosphere from the water surface.

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.  
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## Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: pendimethalin

Assessment biodegradation and elimination (H<sub>2</sub>O):

Not readily biodegradable (by OECD criteria).  
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## Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

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Information on: pendimethalin  
Bioaccumulation potential:  
Bioconcentration factor: 3,300  
Based on a weight of evidence, the compound will not bioaccumulate.  
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### Additional information

Other ecotoxicological advice:  
Do not discharge product into the environment without control.

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## 13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:  
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. Transport Information

### Domestic transport:

UN number or ID number: UN 1993  
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (XYLENE, PENDIMETHALIN)  
Transport hazard class(es): 3, EHSM  
Packing group: III  
Environmental hazards: yes

Special precautions for user: None known

### Sea transport

#### IMDG

UN number or ID number: UN 1993  
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (XYLENE, PENDIMETHALIN)  
Transport hazard class(es): 3, EHSM  
Packing group: III  
Environmental hazards: yes

Marine pollutant: YES

Special precautions for user: EmS: F-E; S-E

### Air transport

#### IATA/ICAO

UN number or ID number: UN 1993  
UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (XYLENE, PENDIMETHALIN)  
Transport hazard class(es): 3  
Packing group: III

Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	None known

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## 15. Regulatory Information

### Other regulations

To avoid risks to man and the environment, comply with the instructions for use.

1. Joint DTI-DENR-DA-DOF-DOH-DILG-DOLE-DOTC Administrative Order No. 01 Series of 2009 on "The Adoption and Implementation of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)"
2. DAO 2015-09 "Rules and Procedures for the Implementation of the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals in Prepration of Safety Data Sheet (SDS) and Labelling Requirements of Toxic Chemical Substances"
3. Republic Act No. 6969, "Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990"

The regulatory information is not intended to be comprehensive. Other regulations may apply to the material

### **Registration status:**

PICCS, PH

Not listed.

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## 16. Other Information

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Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.