

# Safety data sheet

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BASF Safety data sheet  
Date / Revised: 20.01.2015  
Product: **HERBADOX 330 E**

Version: 2.2

(30602025/SDS\_CPA\_PH/EN)

Date of print 21.01.2015

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

### HERBADOX 330 E

Use: crop protection product, herbicide

Manufacturer/supplier:

BASF Philippines, Inc.  
11/F HHIC Building, 1128 University Parkway,  
North Bonifacio, Global City, Taguig, Metro Manila, PHILIPPINES  
Telephone: +63 2 811-8000  
Telefax number: +63 2 838-1025

Emergency information:

National emergency number:  
+63 2 831 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:

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

Precautionary Statement:

If medical advice is needed, have product container or label at hand. Keep out of reach of children.

Precautionary Statements (Prevention):

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe mist. Wear protective gloves and eye/face protection. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area.

Precautionary Statements (Response):

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting. In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. Collect spillage.

Precautionary Statements (Storage):

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Precautionary Statements (Disposal):

Dispose of contents/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.

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### 3. Composition/information on ingredients

#### Chemical nature

crop protection product, herbicide, Emulsifiable concentrate (EC)

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### Hazardous ingredients

#### pendimethalin

Content (W/W): 33.7 %  
CAS Number: 40487-42-1

Acute Tox.: Cat. 5 (oral)  
Skin Sens.: Cat. 1B  
Aquatic Acute: Cat. 1  
Aquatic Chronic: Cat. 1

#### 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 (Auditory organ): Cat. 2  
Aquatic Acute: Cat. 2  
Aquatic Chronic: Cat. 3

#### calciumdodecylbenzenesulfonate

Content (W/W): < 5 %  
CAS Number: 26264-06-2

Skin Corr./Irrit.: Cat. 2  
Eye Dam./Irrit.: Cat. 1

#### Solvent naphtha (petroleum), light arom.

Content (W/W): < 3 %  
CAS Number: 64742-95-6

Asp. Tox.: Cat. 1  
Flam. Liq.: Cat. 1  
Skin Corr./Irrit.: Cat. 2  
STOT SE: Cat. 3 (drowsiness and dizziness)  
Aquatic Acute: Cat. 2  
Aquatic Chronic: Cat. 2

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## 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: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

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

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## 5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

Specific hazards:

carbon monoxide, carbon dioxide, nitrogen oxides

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

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.

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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.

## 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 higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

#### Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): 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 since harmful by inhalation.                         |                                   |
| pH value:                      | approx. 5 - 7<br>(CIPAC standard water D, 1 %(m),<br>approx. 20 °C) |                                   |
| crystallization range:         | < -5 °C   |                                   |
| Boiling range:                 | approx. 137 - 140 °C<br>Information applies to the solvent.         |                                   |
| Flash point:                   | 32 °C   |                                   |
| Evaporation rate:              | not applicable  |                                   |
| Flammability (solid/gas):      | not highly flammable  |                                   |
| Lower explosion limit:         | 1 %(V)  |                                   |
| Upper explosion limit:         | 7 %(V)  |                                   |
| Ignition temperature:          | approx. 375 °C  | (Regulation 440/2008/EC,<br>A.15) |
| Thermal decomposition:         | 210 - 320 °C , 820 kJ/kg  | (DSC (OECD 113))                  |
| Explosion hazard:              | not explosive   | (Regulation 440/2008/EC,<br>A.14) |
| Fire promoting properties:     | not fire-propagating  | (Regulation 440/2008/EC,<br>A.21) |
| Vapour pressure:               | approx. 10.6 hPa<br>(25 °C)<br>Information applies to the solvent.  |                                   |
| Density:                       | approx. 0.97 g/cm <sup>3</sup><br>(approx. 20 °C)                   |                                   |
| Relative vapour density (air): | not applicable  |                                   |
| Solubility in water:           | emulsifiable  |                                   |

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Partitioning coefficient n-octanol/water (log Pow):  
not applicable

Viscosity, kinematic: approx. 1 mm<sup>2</sup>/s  
(approx. 40 °C)

**Other Information:**

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

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## 10. Stability and Reactivity

**Conditions to avoid:**

See MSDS section 7 - Handling and storage.

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

**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.

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## 11. Toxicological Information

### Acute toxicity

**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.

**Experimental/calculated data:**

LD50 rat (oral): 3,366 mg/kg

LC50 rat (by inhalation): > 9.38 mg/l 4 h

An aerosol was tested.

LD50 rat (dermal): > 2,000 mg/kg

No mortality was observed.

### 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.

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### **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.

The product contains: pendimethalin

May produce an allergic reaction.



**Specific target organ toxicity (single exposure):**

Assessment of STOT single:  
Causes temporary irritation of the respiratory tract.

**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:

The substance may cause damage to the peripheral nervous system after repeated ingestion of high doses.

Information on: Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified

Assessment of repeated dose toxicity:

Effects on the kidney of male rats were detected after repeated exposure. These effects are specific for the male rat and are known to be of no relevance to humans. After repeated exposure the prominent effect is local irritation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

**Aspiration hazard**

May also damage the lung at swallowing (aspiration hazard).

**Other relevant toxicity information**

Misuse can be harmful to health.

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**12. Ecological Information****Ecotoxicity**

Assessment of aquatic toxicity:

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

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Information on: pendimethalin

Toxicity to fish:

LC50 (96 h) 0.89 mg/l, *Oncorhynchus mykiss* (static)

Information on: pendimethalin

Aquatic invertebrates:

EC50 (48 h) 0.4 mg/l, *Daphnia magna* (static)

EC50 (48 h) 7.73 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

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Information on: pendimethalin  
Aquatic plants:  
EC50 (5 d) 0.005 mg/l, Skeletonema costatum (static)  
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### **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.

Information on: pendimethalin  
Assessment bioaccumulation potential:  
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.

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

## 14. Transport Information

### Domestic transport:

Hazard class: 3  
 Packing group: III  
 ID number: UN 1993  
 Hazard label: 3, EHSM  
 Proper shipping name: FLAMMABLE LIQUID, N.O.S. (contains XYLENE, PENDIMETHALIN, SOLVENT NAPHTHA)

### Sea transport

#### IMDG

Hazard class: 3  
 Packing group: III  
 ID number: UN 1993  
 Hazard label: 3, EHSM  
 Marine pollutant: YES  
 Proper shipping name: FLAMMABLE LIQUID, N.O.S. (contains XYLENE, PENDIMETHALIN, SOLVENT NAPHTHA)

### Air transport

#### IATA/ICAO

Hazard class: 3  
 Packing group: III  
 ID number: UN 1993  
 Hazard label: 3  
 Proper shipping name: FLAMMABLE LIQUID, N.O.S. (contains XYLENE, PENDIMETHALIN, SOLVENT NAPHTHA)

## 15. Regulatory Information

### Regulations of the European union (Labelling)

#### EEC Directives:

Hazard symbol(s)  
 Xn Harmful.  
 N Dangerous for the environment.

R-phrases(s)

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|             |  |
|-------------|--|
| R10         | Flammable.   |
| R41         | Risk of serious damage to eyes.  |
| R48/20      | Harmful: Danger of serious damage to health by prolonged exposure through inhalation.            |
| R65         | Harmful: may cause lung damage if swallowed.   |
| R50/53      | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| S-phrase(s) |  |
| S2          | Keep out of the reach of children.   |
| S13         | Keep away from food, drink and animal feeding stuffs.  |
| S20/21      | When using do not eat, drink or smoke.   |
| S26         | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.    |
| S29/35      | Do not empty into drains, this material and its container must be disposed of in a safe way.     |
| S39         | Wear eye/face protection.  |
| S46         | If swallowed, seek medical advice immediately and show this container or label.                  |
| S57         | Use appropriate container to avoid environmental contamination.                                  |

Hazard determining component(s) for labelling: PENDIMETHALIN, XYLENE

### **Other regulations**

For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

### **Registration status:**

|                           |                      |
|---------------------------|----------------------|
| PICCS, PH<br>005-264-0653 | released / listed    |
| PICCS, PH                 | blocked / not listed |

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## **16. Other Information**

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. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.