

# Safety data sheet

Page: 1/11

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 10.04.2012

Version: 4.0

Product: **PIX**

(ID no. 30122198/SDS\_CPA\_EU/EN)

Date of print 17.09.2015

## 1. Identification of the substance/mixture and of the company/undertaking

### Product identifier

**PIX**

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

Relevant identified uses: crop protection product, growth regulator

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

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Crop Protection

Telephone: +49 621 60-27777

E-mail address: [Produktinformation-Pflanzenschutz@basf.com](mailto:Produktinformation-Pflanzenschutz@basf.com)

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## 2. Hazards Identification

### Label elements

Globally Harmonized System, EU (GHS)

Hazard Statement:

EUH401

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

The product does not require a hazard warning label in accordance with GHS criteria.

According to Directive 67/548/EEC or 1999/45/EC

## Self classification

## 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.

The product does not require a hazard warning label in accordance with EC Directives.

**Classification of the substance or mixture**According to Regulation (EC) No 1272/2008 [CLP]

| No need for classification according to GHS criteria for this product.

According to Directive 67/548/EEC or 1999/45/EC

## Possible Hazards:

No specific dangers known, if the regulations/notes for storage and handling are considered.

**Other hazards**According to Regulation (EC) No 1272/2008 [CLP]

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****Mixtures**Chemical nature

crop protection product, growth regulator, Soluble concentrate (SL)

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

| Mepiquat-chloride techn.

Content (W/W): 5 %	Acute Tox. 4 (oral)
CAS Number: 24307-26-4	Aquatic Chronic 3
	H302, H412

Hazardous ingredients

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according to Directive 1999/45/EC

| Mepiquat-chloride techn.

Content (W/W): 5 %  
CAS Number: 24307-26-4  
Hazard symbol(s): Xn  
R-phrases: 22, 52/53

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

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## 4. First-Aid Measures

### Description of first aid measures

| Remove contaminated clothing.

If inhaled:

| Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

| Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

| Rinse mouth and then drink plenty of water.

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

Symptoms: No significant reaction of the human body to the product known.

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

| Treatment: Symptomatic treatment (decontamination, vital functions).

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## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:  
water spray, foam, dry powder, carbon dioxide

### Special hazards arising from the substance or mixture

| hydrogen chloride, carbon monoxide, Carbon dioxide, nitrogen oxides  
The substances/groups of substances mentioned can be released in case of fire.

### Advice for fire-fighters

Special protective equipment:  
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. 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.

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## 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

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

### Environmental precautions

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

### Methods and material for containment and cleaning 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.

### Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## 7. Handling and Storage

### Precautions for safe 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:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Conditions for safe storage, including any incompatibilities: Segregate from foods and animal feeds. Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 60 Months

### Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## 8. Exposure Controls/Personal Protection

### Control parameters

Components with workplace control parameters

No occupational exposure limits known.

## Exposure controls

### Personal protective equipment

Respiratory protection:

Respiratory protection not required.

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) and other

Eye protection:

Safety glasses with side-shields (frame 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

Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Keep away from food, drink and animal feeding stuffs. Store work clothing separately.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Form:	liquid	
Colour:	pinkish	
Odour:	almost odourless	
Odour threshold:		
	not determined	
pH value:	approx. 5 - 7 (20 °C) (measured with the undiluted substance)	
solidification temperature:	approx. -2 °C	
boiling temperature:	approx. 100 °C Information applies to the solvent.	
Flash point:	No flash point - Measurement made up to the boiling point.	(Directive 92/69/EEC, A.9)
Evaporation rate:	not applicable	
Flammability:	does not ignite	
Lower explosion limit:	not determined	
Upper explosion limit:	not determined	
Ignition temperature:	> 600 °C	(Directive 92/69/EEC, A.15)

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Vapour pressure:	approx. 23 hPa (20 °C)	
Density:	Information applies to the solvent. approx. 1.00 g/cm <sup>3</sup> (20 °C)	(OECD Guideline 109)
Relative vapour density (air):	not determined	
Solubility in water:	fully soluble	
<i>Information on: Mepiquat-chloride techn.</i>		
Partitioning coefficient <i>n</i> -octanol/water (log Kow):	-3.55 (pH value: 7)	(OECD Guideline 107)
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Thermal decomposition:	not determined	
Viscosity, dynamic:	1 mPa.s (20 °C, 100 1/s)	(OECD 114)
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	

**Other information**

Other Information:

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

**10. Stability and Reactivity****Reactivity**

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

Corrosion to metals: aluminum

**Chemical stability**

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

**Possibility of hazardous reactions**

Corrodes aluminum. No hazardous reactions if stored and handled as prescribed/indicated.

**Conditions to avoid**

See MSDS section 7 - Handling and storage.

**Incompatible materials**

Substances to avoid:

strong bases, strong acids, strong oxidizing agents

**Hazardous decomposition products**

Hazardous decomposition products:

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

## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

| *Information on: Mepiquat-chloride techn.*

*Experimental/calculated data:*

*LD50 rat (oral): approx. 464 mg/kg (OECD Guideline 401)*

| *Information on: Mepiquat-chloride techn.*

*Experimental/calculated data:*

*LC50 rat (by inhalation): > 4.89 mg/l 4 h (OECD Guideline 403)*

| *Information on: Mepiquat-chloride techn.*

*Experimental/calculated data:*

*LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)*

#### Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

| *Information on: Mepiquat-chloride techn.*

*Experimental/calculated data:*

*Skin corrosion/irritation rabbit: non-irritant (other)*  
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| *Information on: Mepiquat-chloride techn.*

*Experimental/calculated data:*

*Serious eye damage/irritation rabbit: non-irritant (other)*  
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#### Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from the properties of the individual components.

| *Information on: Mepiquat-chloride techn.*

*Experimental/calculated data:*

*Guinea pig maximization test guinea pig: Skin sensitizing effects were not observed in animal studies. (other)*

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#### 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. The results of various animal studies gave no indication of a carcinogenic effect.

#### 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.

#### 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. No substance-specific organotoxicity was observed after repeated administration of high doses to animals.

#### Other relevant toxicity information

Misuse can be harmful to health.

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## 12. Ecological Information

### Toxicity

#### Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

**|** *Information on: Mepiquat-chloride techn.*

*Toxicity to fish:*

*LC50 (96 h) > 100 mg/l, Oncorhynchus mykiss (OECD Guideline 203)*

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**|** *Information on: Mepiquat-chloride techn.*

*Aquatic invertebrates:*

*EC50 (48 h) 68.5 mg/l, Daphnia magna (Directive 79/831/EEC)*



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 | *Information on: Mepiquat-chloride techn.*

| *Aquatic plants:*

| *EC50 (96 h) 44.8 mg/l (growth rate), Anabaena flos-aquae (OECD Guideline 201, static)*

| *EC50 (7 d) 15.41 mg/l (growth rate), Lemna gibba (OECD guideline 221, static)*

*No observed effect concentration 0.01 mg/l, Lemna gibba (OECD guideline 221, static)*

### **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: Mepiquat-chloride techn.*

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

| *Readily biodegradable (according to OECD criteria). -----*

### **Bioaccumulative potential**

Assessment bioaccumulation potential:

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

| *Information on: Mepiquat-chloride techn.*

| *Bioaccumulation potential:*

*Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.*

### **Mobility in soil (and other compartments if available)**

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: Mepiquat-chloride techn.*

| *Assessment transport between environmental compartments:*

*Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.*

### **Results of PBT and vPvB assessment**

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### **Other adverse effects**

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

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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****Waste treatment methods**

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****Land transport**

ADR

Not classified as a dangerous good under transport regulations

RID

Not classified as a dangerous good under transport regulations

**Inland waterway transport**

ADN

Not classified as a dangerous good under transport regulations

**Sea transport**

IMDG

Not classified as a dangerous good under transport regulations

**Air transport**

IATA/ICAO

Not classified as a dangerous good under transport regulations

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**15. Regulatory Information****Safety, health and environmental regulations/legislation specific for the substance or mixture**

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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)

## Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

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## 16. Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

Xn	Harmful.
22	Harmful if swallowed.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Acute Tox.	Acute toxicity
Aquatic Chronic	Hazardous to the aquatic environment - chronic
H302	Harmful if swallowed.
H412	Harmful to aquatic life with long lasting effects.

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.

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