

Safety data sheet

Page: 1/21

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Duett Star

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, fungicide

1.3. 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

1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

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

Acute Tox. 4 (Inhalation - mist)	H332 Harmful if inhaled.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Carc. 2	H351 Suspected of causing cancer.
Repr. 1B	H360Df May damage the unborn child. Suspected of damaging fertility.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

According to BASF current knowledge and application of the criteria given in Annex I of Regulation (EC) No. 1272/2008, the following classification exceeding the classification given in Regulation (EC) No 1272/2008, Annex VI, Table 3.1 is required.

Acute Tox. 4 (Inhalation - mist)
Skin Sens. 1
Carc. 2
Repr. 2 (fertility)
Repr. 1B (unborn child)
Aquatic Chronic 1

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

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

Pictogram:



Signal Word:

Danger

Hazard Statement:

H332	Harmful if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statement:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

- P103 Read carefully and follow all instructions.
- Precautionary Statements (Prevention):
- P280 Wear protective gloves, protective clothing and eye protection or face protection.
- P271 Use only outdoors or in a well-ventilated area.
- P201 Obtain special instructions before use.
- P260 Do not breathe mist or vapour.
- P202 Do not handle until all safety precautions have been read and understood.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- Precautionary Statements (Response):
- P312 Call a POISON CENTER or physician if you feel unwell.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308 + P313 IF exposed or concerned: Get medical attention.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P333 + P313 If skin irritation or rash occurs: Get medical attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.
- P391 Collect spillage.
- Precautionary Statements (Storage):
- P405 Store locked up.
- Precautionary Statements (Disposal):
- P501 Dispose of contents and container to hazardous or special waste collection point.

Labeling of special preparations (GHS):

EUH208: May produce an allergic reaction. Contains: 1,2-benzisothiazol-3(2H)-one
Restricted to professional users.

Hazard determining component(s) for labelling: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine, epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane, Alcohols, C16-18, ethoxylated propoxylated, 2-methylisothiazol-3(2H)-one

2.3. 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. Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

crop protection product, fungicide, Suspo-emulsion (SE)

Regulatory relevant ingredients

fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine

Content (W/W): 24.53 %

Acute Tox. 4 (oral)

CAS Number: 67564-91-4

Skin Corr./Irrit. 2

EC-Number: 266-719-9

Repr. 2 (unborn child)

Aquatic Chronic 2

H315, H302, H361d, H411, EUH401

epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Content (W/W): 8.24 %

Carc. 2

CAS Number: 133855-98-8

Repr. 1B

EC-Number: 406-850-2

Aquatic Chronic 2

REACH registration number: 01-0000015634-70

H351, H360Df, H411

INDEX-Number: 613-175-00-9

Alcohols, C16-18, ethoxylated propoxylated

Content (W/W): < 10 %

Acute Tox. 2 (Inhalation - mist)

CAS Number: 68002-96-0

Aquatic Acute 1

Aquatic Chronic 3

M-factor acute: 1

H330, H412, H400

Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt

Content (W/W): < 5 %

Eye Dam./Irrit. 2

CAS Number: 102980-04-1

Aquatic Chronic 3

H319, H412

Hydrocarbons, C10-C13, aromatics, >1% naphthalene

Content (W/W): < 3 %

Asp. Tox. 1

REACH registration number: 01-2119451151-53

Carc. 2

Aquatic Chronic 2

H304, H351, H411

EUH066

1,2-benzisothiazol-3(2H)-one

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

Content (W/W): < 0.05 %
CAS Number: 2634-33-5
EC-Number: 220-120-9
REACH registration number: 01-2120761540-60
INDEX-Number: 613-088-00-6

Acute Tox. 4 (oral)
Skin Corr./Irrit. 2
Eye Dam./Irrit. 1
Skin Sens. 1
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 1
M-factor chronic: 1
H318, H315, H302, H317, H400, H410

Specific concentration limit:

Skin Sens. 1: >= 0.05 %

2-methylisothiazol-3(2H)-one

Content (W/W): < 0.01 %
CAS Number: 2682-20-4
EC-Number: 220-239-6
REACH registration number: 01-2120764690-50
INDEX-Number: 613-326-00-9

Acute Tox. 2 (Inhalation - dust)
Acute Tox. 3 (oral)
Acute Tox. 3 (dermal)
Skin Corr./Irrit. 1B
Eye Dam./Irrit. 1
Skin Sens. 1A
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 10
M-factor chronic: 1
H330, H317, H314, H301 + H311, H400, H410
EUH071

Specific concentration limit:

Skin Sens. 1A: >= 0.0015 %

Propane-1,2-diol

Content (W/W): < 5 %
CAS Number: 57-55-6
EC-Number: 200-338-0
REACH registration number: 01-2119456809-23

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

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.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:

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

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

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

4.3. Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

Endangering substances: carbon monoxide, hydrogen chloride, hydrogen fluoride, Carbon dioxide, nitrogen oxides, halogenated compounds, sulfur oxides, silicon oxides

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

5.3. Advice for fire-fighters

Special protective equipment:

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

Further information:

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

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. 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. Wear suitable protective equipment.

6.4. Reference to other sections

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

SECTION 7: Handling and Storage

7.1. 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.

7.2. 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

Protect from temperatures below: -10 °C

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

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

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.

7.3. 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.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

57-55-6: Propane-1,2-diol

Hydrocarbons, C10-C13, aromatics, >1% naphthalene

67564-91-4: fenpropimorph (ISO)

| TWA value 0.04 mg/m³ (BASF recomm. occupational exposure limit)

133855-98-8: epoxiconazole (ISO)

| TWA value 0.05 mg/m³ (Recommendation of BASF)

8.2. Exposure controls

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:

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

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.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	liquid	
Form:	liquid	
Colour:	white	
Odour:	faintly aromatic	
Odour threshold:	Not determined since harmful by inhalation.	
crystallization temperature:	approx. -2.2 °C	(measured)
Boiling point:	approx. 100 °C	
Flammability:	Information applies to the solvent.	
Lower explosion limit:	not applicable	
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Flash point:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Auto-ignition temperature:	Non-flammable.	
Thermal decomposition:	417 °C	
pH value:	295 °C, 160 kJ/kg (DSC (OECD 113)) (onset temperature)	
Viscosity, dynamic:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
Solubility in water:	approx. 6.5 - 8.5	(pH Meter)
Partitioning coefficient n-octanol/water (log Kow):	(20 °C)	
	(measured with the undiluted substance)	
	approx. 47.1 mPa.s	(OECD 114)
	(20 °C, 100 1/s)	
	dispersible	
	not applicable	

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

Vapour pressure: approx. 23 mbar
(20 °C)
Information applies to the solvent.

Density: approx. 1.02 g/cm³ (OECD Guideline 109)
(20 °C)

Relative vapour density (air):
not applicable

Information on: Solvent naphtha (petroleum), heavy arom., > 1% naphthalene [EXT]

Relative vapour density (air): 5.3
Heavier than air.

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: Based on the chemical structure
there is no indication of explosive
properties.

Oxidizing properties

Fire promoting properties: Based on its structural properties (Directive 2004/73/EC, A.21)
the product is not classified as
oxidizing.

Other safety characteristics

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

Evaporation rate:
not applicable

SECTION 10: Stability and Reactivity

10.1. Reactivity

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

See SDS section 7 - Handling and storage.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

10.5. Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products:

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

SECTION 11: Toxicological Information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 2,200 mg/kg

No mortality was observed.

LC50 rat (by inhalation): > 2.75 - < 5.2 mg/l 4 h

An aerosol was tested.

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

No mortality was observed.

Irritation

Assessment of irritating effects:

Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation

rabbit: non-irritant

Serious eye damage/irritation

rabbit: non-irritant

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: 2-methylisothiazol-3(2H)-one

Experimental/calculated data:

Buehler test guinea pig: skin sensitizing (OECD Guideline 406)

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: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests.

Information on: Hydrocarbons, C10-C13, aromatics, >1% naphthalene

Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity:

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

Information on: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Assessment of reproduction toxicity:

The results of animal studies suggest a fertility impairing effect.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

Developmental toxicity

Assessment of teratogenicity:

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

Information on: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Assessment of teratogenicity:

EU-classification The substance caused malformations/developmental toxicity in laboratory animals.

Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine

Assessment of teratogenicity:

Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Assessment of repeated dose toxicity:

Repeated exposure to large quantities may affect certain organs. Based on available data, the classification criteria are not met.

Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine

Assessment of repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies.

Aspiration hazard

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

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

No aspiration hazard expected.

Interactive effects

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information

Other relevant toxicity information

Misuse can be harmful to health.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

Toxic to aquatic life with long lasting effects.

Toxicity to fish:

LC50 (96 h) 2.2 mg/l, *Oncorhynchus mykiss* (static)

Aquatic invertebrates:

EC50 (48 h) 4.44 mg/l, *Daphnia magna* (static)

Aquatic plants:

EC50 (72 h) 5.12 mg/l (growth rate), *Pseudokirchneriella subcapitata*

EC10 (72 h) 0.124 mg/l (growth rate), *Pseudokirchneriella subcapitata*

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

Information on: epoxiconazole (ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Aquatic plants:

EC50 (7 d) 0.0138 mg/l (growth rate), Lemna gibba (OECD guideline 221)

EC10 (7 d) 0.0019 mg/l (growth rate), Lemna gibba (OECD guideline 221)

Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine

Chronic toxicity to fish:

NOAEL (94 d) 0.00016 mg/l, Oncorhynchus mykiss

No observed effect concentration (37 d) 0.00080 mg/l, Brachydanio rerio

Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d) 0.0022 mg/l, Daphnia magna

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

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

Information on: epoxiconazole (ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

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

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

Information on: epoxiconazole (ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
Bioaccumulation potential:

Bioconcentration factor (BCF): 59 - 70, Oncorhynchus mykiss (OECD-Guideline 305)
Does not accumulate in organisms.

Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine
Bioaccumulation potential:

Bioconcentration factor (BCF): 1,169 - 1,220, Oncorhynchus mykiss (OECD-Guideline 305)
Significant accumulation in organisms is not to be expected.

12.4. Mobility in soil

Assessment transport between environmental compartments:

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

Information on: epoxiconazole (ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Information on: fenpropimorph (ISO); cis-4-[3-(p-tert-butylphenyl)-2-methylpropyl]-2,6-dimethylmorpholine

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

12.5. 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.

12.6. Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

12.7. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.8. Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

SECTION 13: Disposal Considerations

13.1. 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.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number: UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENPROPIMORPH, EPOXICONAZOLE, SOLVENT NAPHTHA)

Transport hazard class(es): 9, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

RID

UN number or ID number: UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENPROPIMORPH, EPOXICONAZOLE, SOLVENT NAPHTHA)

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

Inland waterway transport

ADN

UN number or ID number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENPROPIMORPH, EPOXICONAZOLE, SOLVENT NAPHTHA)

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number or ID number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENPROPIMORPH, EPOXICONAZOLE, SOLVENT NAPHTHA)

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Marine pollutant: YES
Special precautions for user: EmS: F-A; S-F

Air transport

IATA/ICAO

UN number or ID number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

N.O.S. (FENPROPIMORPH, EPOXICONAZOLE, SOLVENT
NAPHTHA)

Transport hazard class(es): 9, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

SECTION 15: Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3, 30, 75

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
List entry in regulation: E2

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

15.2. Chemical Safety Assessment

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

SECTION 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 hazard classes and the hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Skin Sens.	Skin sensitization
Carc.	Carcinogenicity
Repr.	Reproductive toxicity
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Skin Corr./Irrit.	Skin corrosion/irritation
Aquatic Acute	Hazardous to the aquatic environment - acute
Eye Dam./Irrit.	Serious eye damage/eye irritation
Asp. Tox.	Aspiration hazard
H332	Harmful if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H330	Fatal if inhaled.
H412	Harmful to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.
H319	Causes serious eye irritation.
H304	May be fatal if swallowed and enters airways.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 01.08.2022

Version: 13.0

Date previous version: 04.06.2021

Previous version: 12.0

Date / First version: 17.05.2002

Product: **Duett Star**

(ID no. 30644115/SDS_CPA_EU/EN)

Date of print 09.12.2025

H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.
H314	Causes severe skin burns and eye damage.
H301 + H311	Toxic if swallowed or in contact with skin
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

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.

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