

Safety data sheet

Page: 1/19

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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

1.1. Product identifier

Deuce

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

Contact address:
BASF plc
PO Box 4, Earl Road, Cheadle Hulme,
Cheadle, Cheshire
SK8 6QG, UNITED KINGDOM

Telephone: +44 161 485-6222
E-mail address: product-safety-north@basf.com

1.4. Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

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.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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

Eye Dam./Irrit. 2	H319 Causes serious eye irritation.
Carc. 2	H351 Suspected of causing cancer.
Repr. 1B	H360D May damage the unborn child.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.

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

2.2. Label elementsGlobally Harmonized System (GHS) in accordance with IE regulations.

Pictogram:



Signal Word:

Danger

Hazard Statement:

H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
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 label before use.

Precautionary Statements (Prevention):

P280	Wear protective gloves/clothing/eye protection.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash contaminated body parts thoroughly after handling.
P201	Obtain special instructions before use.

Precautionary Statements (Response):

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P311 IF exposed or concerned: Call a POISON CENTER or physician.
 P337 + P311 If eye irritation persists: Call a POISON CENTER or physician.
 P391 Collect spillage.

Precautionary Statements (Storage):

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

Labeling of special preparations (GHS):

Restricted to professional users.

EUH208: May produce an allergic reaction. Contains: 2-methylisothiazol-3(2H)-one

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

Hazard determining component(s) for labelling: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide, epoxiconazole(ISO), Methyl-Oxirane, Blockpolymer with Oxirane, Monoisotridecyl ether

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.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

crop protection product, fungicide, suspension concentrate (SC)

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

Content (W/W): 20.73 %

Aquatic Chronic 2

CAS Number: 188425-85-6

H411

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

Content (W/W): 5.96 %

Carc. 2

CAS Number: 133855-98-8

Repr. 1B

EC-Number: 406-850-2

Aquatic Chronic 2

INDEX-Number: 613-175-00-9

H351, H360Df, H411

Methyl-Oxirane, Blockpolymer with Oxirane, Monoisotridecyl ether

Content (W/W): < 15 %

Eye Dam./Irrit. 2

CAS Number: 196823-11-7

H319

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

| Sodium cumenesulphonate

Content (W/W): < 3 %

Eye Dam./Irrit. 2

CAS Number: 28348-53-0

H319

EC-Number: 248-983-7

Reaction mass of 2-ethylhexyl mono-D-glucopyranoside and 2-ethylhexyl di-D-glucopyranoside

Content (W/W): < 5 %

Eye Dam./Irrit. 1

CAS Number: 125590-73-0

H318

EC-Number: 414-420-0

| 2-methylisothiazol-3(2H)-one

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

Content (W/W): < 0.01 %
 CAS Number: 2682-20-4
 EC-Number: 220-239-6
 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): < 10 %
 CAS Number: 57-55-6
 EC-Number: 200-338-0
 REACH registration number: 01-2119456809-23

Cellulose

Content (W/W): < 5 %
 CAS Number: 9004-34-6
 EC-Number: 232-674-9

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.

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:

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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.

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

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.

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, carbon dioxide, foam, dry powder

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

carbon monoxide, hydrogen chloride, hydrogen fluoride, Carbon dioxide, nitrogen oxides, organochloric compounds, sulfur oxides

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:

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.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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.

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environmental Protection Agency if it enters surface or ground waters. Keep people and animals away.

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.

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

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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

TWA value 10 mg/m³ (OEL (IE)), ParticulateTWA value 470 mg/m³ ; 150 ppm (OEL (IE)), Total vapour and particulates

9004-34-6: Cellulose

TWA value 10 mg/m³ (OEL (IE)), Respirable dust

133855-98-8: epoxiconazole(ISO)

TWA value 0.3 mg/m³ (Recommendation of BASF), Respirable dust

Refer to the current schedule of occupational exposure standards published by the Irish HSA. For normal use and handling refer to the product label/leaflet. In all other cases the following apply.

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 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:

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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	suspension
Colour:	white
Odour:	moderate odour, aromatic

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	approx. 6 - 8 (20 °C) (measured with the undiluted substance)	
crystallization temperature:	approx. -5.0 °C	
onset of boiling:	approx. 100 °C (1,013 hPa)	
Flash point:	Information applies to the solvent.	
Evaporation rate:	No flash point - Measurement made up to the boiling point.	
Flammability:	not applicable	
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.	
Ignition temperature:	450 °C	(Directive 92/69/EEC, A.15)
Vapour pressure:	approx. 23 hPa (20 °C) Information applies to the solvent.	
Density:	approx. 1.12 g/cm ³ (20 °C)	
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible (20 °C)	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Thermal decomposition:	220 °C, 120 kJ/kg, (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
Viscosity, dynamic:	355 mPa.s (20 °C, 100 1/s)	

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

9.2. Other information

Other Information:

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

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.

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 toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

Experimental/calculated data:

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

No mortality was observed.

LC50 rat (by inhalation): > 4.75 mg/l 4 h

An aerosol was tested.

LD50 rat (dermal): > 4,000 mg/kg

No mortality was observed.

Irritation

Assessment of irritating effects:

Eye contact causes irritation. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Slightly irritating.

Serious eye damage/irritation rabbit: Irritant. (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

modified Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies.

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: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide**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: epoxiconazole(ISO)**Assessment of carcinogenicity:**Indication of possible carcinogenic effect in animal tests.*

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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.

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.

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: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

Assessment of repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies.

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.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

Aspiration hazard

No aspiration hazard expected.

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.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Toxicity to fish:

LC50 (96 h) 10.6 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h) 17.1 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 14.6 mg/l (growth rate), *Pseudokirchneriella subcapitata*

EC10 (72 h) 0.078 mg/l (growth rate), *Pseudokirchneriella subcapitata*

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: 3-Pyridinecarboxamide, 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

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).

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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

*Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide
Bioaccumulation potential:*

*Bioconcentration factor (BCF): 57 - 70 (28 d), Oncorhynchus mykiss
Does not accumulate in organisms.*

*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.*

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: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

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. Other adverse effects

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

12.7. Additional information

Other ecotoxicological advice:

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains EPOXICONAZOLE, BOSCALID)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

RID

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains EPOXICONAZOLE, BOSCALID)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Inland waterway transport

ADN

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains EPOXICONAZOLE, BOSCALID)

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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: UN 3082
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains EPOXICONAZOLE, BOSCALID)
 Transport hazard class(es): 9, EHSM
 Packing group: III
 Environmental hazards: yes
 Marine pollutant: YES
 Special precautions for user: None known

Air transport

IATA/ICAO

UN number: UN 3082
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains EPOXICONAZOLE, BOSCALID)
 Transport hazard class(es): 9, EHSM
 Packing group: III
 Environmental hazards: yes
 Special precautions for user: None known

14.1. UN number

See corresponding entries for "UN 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)

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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. Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

Further information

The following provisions may apply for product in packages containing a net quantity of 5 L or less
ADR, RID, ADN: Special Provision 375;
IMDG: 2.10.2.7;
IATA: A197;
TDG: Special Provision 99(2);
49CFR: §171.4 (c) (2).

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: 30, 3

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
List entry in regulation: E1

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

This product may be subject to the Seveso III Directive and amendments if specific threshold tonnages are exceeded.

For further medical advice Doctors should contact the National Poisons Information Centre at Beaumont Hospital, Dublin.

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:

Eye Dam./Irrit.	Serious eye damage/eye irritation
Carc.	Carcinogenicity
Repr.	Reproductive toxicity
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Skin Sens.	Skin sensitization
Aquatic Acute	Hazardous to the aquatic environment - acute
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.
H301 + H311	Toxic if swallowed or in contact with skin
H400	Very toxic to aquatic life.
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

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 18.08.2020

Version: 10.0

Date previous version: 03.03.2020

Previous version: 9.0

Product: **Deuce**

(ID no. 30289058/SDS_CPA_IE/EN)

Date of print 19.08.2020

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.