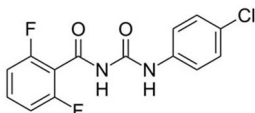


SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Product form	: Substance
Substance name	: Diflubenzuron Tech min 97%
Chemical name	: N-[[[4-chlorophenyl]amino]carbonyl]-2,6-difluorobenzamide
IUPAC name	: 1-(4-chlorophenyl)-3-(2,6-difluorobenzoyl)urea
EC-No.	: 252-529-3
CAS-No.	: 35367-38-5
Type of product	: Biocidal products (e.g. Disinfectants, pest control)
Formula	: C ₁₄ H ₉ ClF ₂ N ₂ O ₂
Chemical structure	:


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

Main use category	: Industrial, Professional use
Use of the substance/mixture	: Insecticide

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

 Simonis B.V.
 P.O. Box P.O. Box 620
 7000 AP Doetinchem - The Netherlands
 T +31 314 333 700 - F +31 314 344 167
agrochem@simonisbv.nl - <http://www.simonisbv.nl>
1.4. Emergency telephone number

Emergency number : +31 314 333 700 (Working Hours Only)

Country	Official advisory body	Address	Emergency number	Remark
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for the purpose of informing medical personnel in cases of acute intoxications

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179

Acute toxicity (dermal), Category 4	H312
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Full text of H statements : see section 16	

Adverse physicochemical, human health and environmental effects

Harmful in contact with skin. Very toxic to aquatic life.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179

Hazard pictograms (CLP) :



GHS07

GHS09

Signal word (CLP) : Warning

 Hazard statements (CLP) : H312 - Harmful in contact with skin.
 H400 - Very toxic to aquatic life.

 Precautionary statements (CLP) : P273 - Avoid release to the environment.
 P280 - Wear protective clothing, protective gloves.
 P312 - Call a POISON CENTER/doctor if you feel unwell.
 P391 - Collect spillage.
 P501 - Dispose of contents and container to an approved waste disposal plant.

Diflubenzuron Tech min 97%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Diflubenzuron Tech min 97%
CAS-No. : 35367-38-5
EC-No. : 252-529-3

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179
Diflubenzuron	(CAS-No.) 35367-38-5 (EC-No.) 252-529-3	>= 97	Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : Take off contaminated clothing. Wash skin with plenty of water. Get medical advice if skin irritation persists.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting without medical advice. Get medical advice/attention if you feel unwell.

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

No additional information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Presents no particular fire or explosion hazard.
Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). Nitrogen oxides. Fume.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Do not allow to enter drains or water courses.

Diflubenzuron Tech min 97%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Concerning personal protective equipment to use, see section 8.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids. Strong oxidation agent.
Heat and ignition sources : Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Insecticide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available.

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Protective clothing. Gloves.

Hand protection:

Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF EN 374 or equivalent).

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Gloves	nitrile rubber (NBR), butyl rubber, Polyvinylchloride (PVC)	6 (> 480 minutes)	>0.11		EN 374

Eye protection:

Safety glasses. DIN EN 166

Skin and body protection:

Wear suitable protective clothing. CEN : EN 340; EN 369; EN 465

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. EN 143

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Diflubenzuron Tech min 97%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Molecular mass	: 310.7 g/mol
Colour	: white.
Odour	: No data available.
Odour threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: 228 °C
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: 210 - 230 °C
Flammability (solid, gas)	: No data available.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
Solubility	: Water: 0.08 mg/l (pH 7; 25°C) Organic solvent: 0.0063 g/100ml (n-hexane; 0,29 g/l toluene; 1,8 g/l dichloromethane; 1,1 g/l methanol; 20°C)
Log Pow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Keep away from heat and direct sunlight.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidation agent.

10.6. Hazardous decomposition products

Combustion generates: Carbon oxides (CO, CO₂). Nitrogen oxides. fume.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Not classified

Diflubenzuron (35367-38-5)

LD50 oral rat	> 4640 mg/kg
LC50 inhalation rat (mg/l)	> 2.88 mg/l
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

Diflubenzuron Tech min 97%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179

STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life.
Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Not classified

Diflubenzuron (35367-38-5)	
LC50 fishes 1	> 0.2 mg/l (Brachydanio rerio)
LC50 fish 2	> 0.2 mg/l (Oncorhynchus mykiss)
EC50 Daphnia 1	7.1 µg/l (Daphnia magna)
EC50 72h algae (1)	> 0.3 mg/l (Selenastrum capricornutum)

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

Diflubenzuron Tech min 97% (35367-38-5)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Empty containers should be taken for recycle, recovery or waste in accordance with local regulation.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 07 04 00 - wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides

SECTION 14: Transport information

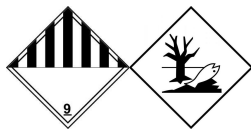
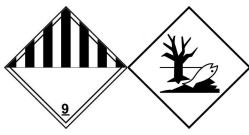
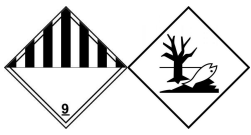
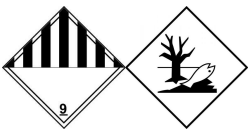
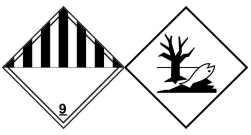
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron)
Transport document description				
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron), 9, III, MARINE POLLUTANT	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS : Diflubenzuron), 9, III


Diflubenzuron Tech min 97%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179

14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available.				
14.6. Special precautions for user				

Overland transport

Classification code (ADR)	: M7
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: PP12, B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAV, LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V13
Special provisions for carriage - Bulk (ADR)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	: 

Tunnel restriction code (ADR)	: -
EAC code	: 2Z

Transport by sea

Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: BK1, BK2, BK3, T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23

Air transport

PCA Excepted quantities (IATA)	: E1
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Diflubenzuron Tech min 97%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179

PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T* B**
Equipment required (ADN)	: PP, A
Number of blue cones/lights (ADN)	: 0
Additional requirements/Remarks (ADN)	: * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. *** Only in the case of transport in bulk.

Rail transport

Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 90

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Diflubenzuron Tech min 97% is not on the REACH Candidate List

Diflubenzuron Tech min 97% is not on the REACH Annex XIV List

Diflubenzuron Tech min 97% is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Diflubenzuron Tech min 97% is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products

This product contains biocidal products

Type of product (Biocide) : 18 - Insecticides, acaricides and products to control other arthropods

Authorisation number :

Directive 2012/18/EU (SEVESO III)

Diflubenzuron Tech min 97%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
SDS	Safety Data Sheet
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
LC50	Median lethal concentration
LD50	Median lethal dose
CAS	CAS (Chemical Abstracts Service) number
EG-nr	EINECS- en ELINCS-number
EINECS	European Inventory of Existing Commercial Substances
OEL	Occupational Exposure Limit

Data sources : according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179.

Other information : REACH Disclaimer:
This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number).
DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
H312	Harmful in contact with skin.
H400	Very toxic to aquatic life.

Safety Data Sheet applicable for regions : GB - United Kingdom

This Safety Data Sheet is compiled by :
Trade Wind B.V. (info@tw.nl)

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.