

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floranid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

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

#### 1.1 Product identifier

Trade name : Floranid® N31 31-0-0

REACH Registration Number : 01-2119457269-28-0001

Substance name : N,N''-(isobutylidene)diurea

CAS-No. : 6104-30-9

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

Use of the Sub-  
stance/Mixture : Fertiliser

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

Company : COMPO EXPERT GmbH  
Krögerweg 10  
D-48155 Münster

Telephone : +49 (0) 251 29 79 81 – 000

Telefax : +49 (0) 251 29 79 81 - 111

E-mail address of person  
responsible for the SDS : info@compo-expert.com

#### 1.4 Emergency telephone number

GBK GmbH - Global Regulatory Compliance - 24h  
Telephone:+49 (0) 6132 - 84463  
Schweiz/Suisse/Svizerra: Tox Info Suisse  
Telephone:145

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

# SAFETY DATA SHEET

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Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Substance name	:	N,N"-(isobutylidene)diurea
CAS-No.	:	6104-30-9
Chemical nature	:	Inorganic fertiliser

### Components

Remarks	:	No hazardous ingredients
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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice	:	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection and use the recommended protective clothing If potential for exposure exists refer to Section 8 for specific personal protective equipment.
If inhaled	:	If breathed in, move person into fresh air. If symptoms persist, call a physician.
In case of skin contact	:	Wash off with soap and water.
In case of eye contact	:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floramid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
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---

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Obtain medical attention.

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

Symptoms : Ingestion may provoke the following symptoms:  
Methaemoglobinemia

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

Treatment : Treat symptomatically.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Water  
Dry chemical  
Water mist  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet  
Carbon dioxide (CO<sub>2</sub>)  
Foam  
Sand

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Thermal decomposition can lead to release of irritating gases and vapours.  
Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Nitrogen oxides (NO<sub>x</sub>)  
Carbon oxides

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
The product itself does not burn.

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according to Regulation (EC) No. 1907/2006, as amended by  
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## Floranid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

---

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.  
Avoid contact with skin, eyes and clothing.  
Wash contaminated clothing before re-use.  
Avoid breathing dust.  
For personal protection see section 8.  
For disposal considerations see section 13.

#### 6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform  
respective authorities.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and transfer to properly labelled containers.

#### 6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.  
Wear personal protective equipment.  
Keep away from combustible material.  
Keep away from heat and sources of ignition.  
Smoking, eating and drinking should be prohibited in the ap-  
plication area.  
Dispose of rinse water in accordance with local and national  
regulations.

Advice on protection against fire and explosion : During processing, dust may form explosive mixture in air.  
The product should only be used in areas from which all na-  
ked lights and other sources of ignition have been excluded.  
Electrical equipment should be protected to the appropriate  
standard.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Wash  
hands before eating, drinking, or smoking. Wash hands before  
breaks and at the end of workday.

Dust explosion class : St1

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floranid® N31 31-0-0

Version 1.1      Revision Date: 24.09.2024      SDS Number: M0012      Date of last issue: 29.08.2024  
Date of first issue: 29.08.2024

### 7.2 Conditions for safe storage, including any incompatibilities

Further information on storage conditions : Keep away from sources of ignition - No smoking. Keep away from direct sunlight. Protect from moisture.

Advice on common storage : Keep away from combustible materials.  
Keep away from strong acids.  
Keep away from strong bases.  
Keep away from food, drink and animal feedingstuffs.

Further information on storage stability : Protect from frost, heat and sunlight.

### 7.3 Specific end use(s)

Specific use(s) : Not relevant

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
N,N''-(isobutylidene)diurea	Workers	Skin contact	Long-term systemic effects	37,5 mg/kg
	Workers	Inhalation	Long-term systemic effects	66,12 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	18,75 mg/kg
	Consumers	Inhalation	Long-term systemic effects	16,31 mg/m <sup>3</sup>
	Consumers	Ingestion	Long-term systemic effects	9,37 mg/kg

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
N,N''-(isobutylidene)diurea	Fresh water	0,5 mg/l
	Marine water	0,05 mg/l
	Fresh water sediment	1,76 mg/l
	Marine sediment	0,176 mg/l
	Soil	10,7 mg/l
	Behaviour in waste water treatment plants	640 mg/l

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floranid® N31 31-0-0

Version 1.1	Revision Date: 24.09.2024	SDS Number: M0012	Date of last issue: 29.08.2024 Date of first issue: 29.08.2024
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Hand protection	
Material	: Gloves
Directive	: Equipment should conform to EN 374
Remarks	: As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use.
Skin and body protection	: Long sleeved clothing
Respiratory protection	: In the case of dust or aerosol formation use respirator with an approved filter. Equipment should conform to EN 14387
Filter type	: Filter type P
Protective measures	: Handle in accordance with good industrial hygiene and safety practice. Wash contaminated clothing before re-use.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	: solid
Colour	: white
Odour	: very faint
Melting point/range	: not determined
Boiling point/boiling range	: not determined
Upper explosion limit / Upper flammability limit	: Not applicable
Lower explosion limit / Lower flammability limit	: Not applicable
Flash point	: Not applicable

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floranid® N31 31-0-0

Version 1.1	Revision Date: 24.09.2024	SDS Number: M0012	Date of last issue: 29.08.2024 Date of first issue: 29.08.2024
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Decomposition temperature	:	> 130 °C
pH	:	6 - 7 (20 °C) Concentration: 100 g/l
Solubility(ies) Water solubility	:	0,3 - 3 g/l (20 °C) soluble
Partition coefficient: n- octanol/water	:	Not applicable
Density	:	No data available
Bulk density	:	500 - 700 kg/m <sup>3</sup>

### 9.2 Other information

Explosives	:	Dust may form explosive mixture in air.
Self-ignition	:	not auto-flammable
Dust deflagration index (Kst)	:	122 m.b./s
Dust explosion class	:	St1
Minimum ignition energy	:	63 - 152 mJ

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions	:	Dust can form an explosive mixture in air. Heating can release hazardous gases.
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### 10.4 Conditions to avoid

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floramid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

---

Conditions to avoid : Hot surface(s)  
Direct sources of heat.

### 10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products : ammonia  
Carbon dioxide (CO<sub>2</sub>)

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## SECTION 11: Toxicological information

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

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

#### Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

#### Respiratory or skin sensitisation

##### Skin sensitisation

Based on available data, the classification criteria are not met.

##### Respiratory sensitisation

Based on available data, the classification criteria are not met.

##### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

##### Carcinogenicity

Based on available data, the classification criteria are not met.

##### Reproductive toxicity

Based on available data, the classification criteria are not met.

##### STOT - single exposure

Based on available data, the classification criteria are not met.

##### STOT - repeated exposure

Based on available data, the classification criteria are not met.

##### Aspiration toxicity

Based on available data, the classification criteria are not met.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floranid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

### 11.2 Information on other hazards

#### Endocrine disrupting properties

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 12: Ecological information

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not flush into surface water or sanitary sewer system.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floramid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

Dispose of in accordance with local regulations.  
Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging : Empty remaining contents.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA\_P : Not regulated as a dangerous good

#### 14.2 UN proper shipping name

ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA\_P : Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA\_P : Not regulated as a dangerous good

#### 14.4 Packing group

ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA (Cargo) : Not regulated as a dangerous good  
IATA\_P (Passenger) : Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Maritime transport in bulk according to IMO instruments

# SAFETY DATA SHEET

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## Floranid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

Regulatory basis : IMSBC Code  
Remarks : Product is not allowed to be transported in bulk.

### SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

### SECTION 16: Other information

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## Floranid® N31 31-0-0

Version	Revision Date:	SDS Number:	Date of last issue: 29.08.2024
1.1	24.09.2024	M0012	Date of first issue: 29.08.2024

---

Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

IE / EN