

**Floranid Permanent**Version 3
Revision Date 15.01.2007

Print Date 15.01.2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : Floranid Permanent

Use of the
Substance/Preparation : fertiliserCompany : COMPO GmbH & Co. KG
Gildenstraße 38
D-48157 MünsterTelephone : +49-0251/3277-0
Telefax : +49-0251/326225Emergency telephone : BASF works fire brigade Ludwigshafen
number Telephone: 0621-60-43333**2. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical nature**

NPK - fertilizer contains: N,N'-(2-Methylpropyliden)-bis-urea, ammonium nitrate, potassium sulfate, ammonium salt, phosphate, magnesium salt, calcium salt, trace element combination.

Hazardous components

| Chemical Name | CAS-No. | EINECS-No. | Index-No. | Symbol(s) | R-phrase(s) | Concentration [%] |
|------------------|-----------|------------|-----------|-----------|-------------|---------------------|
| Ammonium Nitrate | 6484-52-2 | 229-347-8 | | | | >= 10,00 - <= 45,00 |

For the full text of the R phrases mentioned in this Section, see Section 16.

3. HAZARDS IDENTIFICATION**Risk advice to man and the environment**

No particular dangers occur if the regulation/notes for storage and handling are observed.

4. FIRST AID MEASURESInhalation : If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.
On inhalation of decomposition products:
Inhale corticosteroid dose aerosol (e.g. dexamethazone).
Keep patient calm, remove to fresh air, seek medical attention.

Skin contact : Wash thoroughly with soap and water.

**Floranid Permanent**

Version 3
Revision Date 15.01.2007

Print Date 15.01.2007

- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Ingestion : Rinse mouth immediately and then drink plenty of water, seek medical attention.

Notes to physician

- Risks : Inhalation of decomposition products can lead to lung oedema. Symptoms can appear later. Danger of methaemoglobin formation.
- Treatment : Treat according to symptoms (decontamination, vital functions), treat with toluonium chloride to reverse methaemoglobinanaemia. Pulmonary odema prophylaxis.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : water
- Extinguishing media which must not be used for safety reasons : foam
dry chemical
carbon dioxide (CO₂)
sand
- Specific hazards during fire fighting : Can decompose at above 100 °C. Thermal decomposition products:
Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia
Isobutyraldehyd
- Special protective equipment for fire-fighters : Wear a self-contained breathing apparatus.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

- Environmental precautions : Do not flush into surface water or sanitary sewer system. Retain and dispose of contaminated wash water.
- Methods for cleaning up : Use mechanical handling equipment.

7. HANDLING AND STORAGE**Handling**

- Advice on protection : The product is incombustible. It can lower the ignition

**Floranid Permanent**

Version 3
Revision Date 15.01.2007

Print Date 15.01.2007

against fire and explosion

temperature of combustible substances.
Keep away from sources of ignition - No smoking.
Keep away from combustible material.
Avoid influence of heat.
Risk of explosion if heated under confinement.

Storage

Requirements for storage
areas and containers

: When stored loose do not mix with other fertilizers.
Store well away from other substances.
Keep away from direct sunlight.
Protect against heat.
Avoid contamination.
Protect against humidity (product is hygroscopic and tends to
cake or disintegrate)

German storage class

: 5.1C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Personal protective equipment**

Respiratory protection

: Breathing apparatus only if aerosol or dust is formed.

Hygiene measures

: At the end of the shift the skin should be cleaned and skin-care
agents applied.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form

: granular

Colour

: various, depending on the colorant

Odour

: almost odourless

Safety data

pH

: approx.6,2
at 100 g/l (20 °C)

Bulk density

: approx.910 kg/m³
Method: EN 1236

Water solubility

: mainly soluble

**Floranid Permanent**

Version 3
Revision Date 15.01.2007

Print Date 15.01.2007

10. STABILITY AND REACTIVITY

- Materials to avoid : Sulphur, chlorites, chloride, chlorates, Hypochlorites, acid or alkaline reacting substances, flammable oxidizable substances, nitrites, metallic salts, metallic powder, herbicide, chlorinated hydrocarbons, organic compounds.
- Hazardous decomposition products : Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia
Isobutyraldehyd
- Thermal decomposition : approx. 100 °C
To avoid thermal decomposition, do not overheat.
Thermal decomposition above the indicated temperature is possible.
The product is not capable of self-sustaining progressive thermal decomposition (UN S1).
- Hazardous reactions : Evolution of ammonia under influence of alkalies.

11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity : LD50 rat
Dose: > 2.000 mg/kg
- Skin irritation : rabbit
Result: non-irritant
Method: OECD Test Guideline 404
- Eye irritation : rabbit
Result: non-irritant
Method: OECD Test Guideline 405
- Further information : Danger of methaemoglobin formation.
The product was not tested. The statement was derived from products of similar structure and composition.

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

- Physico-chemical removability : DOC reduction
approx. 85 %
Method: OECD 301E/92/69/EWG, C.4-B
Remarks:
May be eliminated in purification plants

Ecotoxicity effects

- Toxicity to fish : LC50
Species: Rainbow trout



Floranid Permanent

Version 3
Revision Date 15.01.2007

Print Date 15.01.2007

| | | |
|-----------------------------------|---|---|
| | | Dose: > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 |
| aquatic invertebrates | : | EC50 Species: Daphnia magna Dose: > 100 mg/l Exposure time: 48 h Method: Directive 84/449/EEC, C.2 |
| Toxicity to algae | : | EC50 Species: green algae Dose: > 100 mg/l Exposure time: 72 h |
| Toxicity to bacteria | : | activated sludge EC0 Species: Pseudomonas putida Dose: approx. 640 mg/l Exposure time: 16 h Method: no data available |
| Additional ecological information | : | Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. There is a high probability that the product is acute not harmful to aquatic organisms. information on: Isodur |

13. DISPOSAL CONSIDERATIONS

| | | |
|----------------------------------|---|---|
| Product | : | Test for use in agriculture. Contact manufacturer. |
| Contaminated packaging | : | Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned. |
| Waste key for the unused product | : | 02 01 09: Wastes of chemicals for the agriculture excepted of those, which are listed under 02 01 08 |

14. TRANSPORT INFORMATION

Further Information

Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR



Floranid Permanent

Version 3
Revision Date 15.01.2007

Print Date 15.01.2007

15. REGULATORY INFORMATION

Labelling according to EC Directives

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

National legislation

Further information : German "Hazardous Substances" legislation (Gefahrstoffverordnung) appendix III, No. 6 (Ammonium Nitrate group C)
Directive 76/116/EEC on the approximation of the laws relating to fertilizers.
The authority permits and storage regulations must be observed.

Water contaminating class : WGK 1 slightly water endangering (Germany)

16. OTHER INFORMATION

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.