

## NovaTec 18 fluid

Version: 3.1

Revision Date:  
26.01.2017

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

#### 1.1 Product identifier

Trade name : NovaTec 18 fluid

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

Use of the Sub-  
stance/Mixture : Fertilizer

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

Company : COMPO EXPERT GmbH  
Kroegerweg 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

Quality / Safety / Environment  
Telephone:+49 (0) 2151 - 579 - 0

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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 according to Regulation (EC) No. 1272/2008.

#### 2.2 Label elements

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

Hazard statements : Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Further information : German "Hazardous Substances" legislation ( Gefahrstoffverordnung) appendix I, No. 5 (Ammonium Nitrate group D III)

#### 2.3 Other hazards

None known.

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Chemical nature : Liquid mixture of organic and inorganic salts of fertilizers.

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1H-Pyrazole, 3,4-dimethyl-,phosphate (1:1)

### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
ammonium nitrate	6484-52-2 229-347-8 01-2119490981-27-XXXX	Ox. Sol. 3; H272 Eye Irrit. 2; H319	>= 50 - <= 55

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- If inhaled : On inhalation of decomposition products:  
In case of lung irritation, first treatment with dexametason aerosol (spray).  
Keep patient calm, remove to fresh air, seek medical attention.
- In case of skin contact : Wash off immediately with soap and plenty of water.
- In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
If symptoms persist, seek medical advice.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.

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

Symptoms : No information available.

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

Treatment : Treat symptotomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Water
- Unsuitable extinguishing media : Dry powder  
Sand

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

Specific hazards during fire- : In case of combustion evolution of dangerous gases possible.

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fighting	At temperatures above 130 °C, dangerous decomposition gases can be emitted: Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia
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### 5.3 Advice for firefighters

Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes.
Further information	: Cool endangered containers with water-spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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## SECTION 6: Accidental release measures

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

Personal precautions	: Ensure adequate ventilation. Avoid contact with skin and eyes. In case of involuntary exposition of the product contact producer or supplier.
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### 6.2 Environmental precautions

Environmental precautions	: Do not flush into surface water or sanitary sewer system. Retain and dispose of contaminated wash water.
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### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Rinse with water.
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### 6.4 Reference to other sections

none

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling	: Keep away from heat. Keep away from direct sunlight. Do not allow to dry.
Advice on protection against fire and explosion	: The product is not flammable. Risk of explosion if heated under confinement. Keep away from combustible materials.
Hygiene measures	: Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. When using do not eat, drink or smoke.

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

Requirements for storage areas and containers : Do not allow to dry. Keep away from direct sunlight. Keep away from heat.

Storage class (TRGS 510) : 12, Non Combustible Liquids

Recommended storage temperature : 5 - 35 °C

### 7.3 Specific end use(s)

Specific use(s) : Always read the label and product information before use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

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

Substance name	End Use	Exposure routes	Potential health effects	Value
ammonium nitrate	Workers	Inhalation	Specific effects	36 mg/m <sup>3</sup>
Remarks:	Exposure time: 1 d			
	Workers	Skin contact	Specific effects	5,12 mg/kg
Remarks:	Exposure time: 1 d			
	Consumers	Ingestion	Specific effects	2,56 mg/kg bw/day
Remarks:	Exposure time: 1 d			
	Consumers	Inhalation	Specific effects	8,9 mg/m <sup>3</sup>
Remarks:	Exposure time: 1 d			

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

Substance name	Environmental Compartment	Value
ammonium nitrate	Fresh water	0,45 mg/l
	Marine water	0,045 mg/l
	Ceiling Limit Value	4,5 mg/l

### 8.2 Exposure controls

#### Personal protective equipment

Eye protection : Tightly fitting safety goggles (splash goggles) (EN 166)

Hand protection

Remarks : For prolonged or repeated contact use protective gloves. Chemical resistant protective gloves (EN 374). Suitable ma-

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materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

### Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.  
Retain and dispose of contaminated wash water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: product specific
Odour	: characteristic
Odour Threshold	: No data available
pH	: ca. 3 - 5, (20 °C)
crystallization temperature	: ca. -5 °C
Boiling range	: ca. 110 °C
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not explosive
Lower explosion limit	: Not explosive
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: ca. 1,25 g/cm <sup>3</sup> (20 °C)
Solubility(ies)	
Water solubility	: soluble

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Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	ca. 130 °C To avoid thermal decomposition, do not overheat. Thermal decomposition above the indicated temperature is possible.
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Not considered an oxidizing substance

### 9.2 Other information

Surface tension	:	No data available
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage conditions.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Evolution of ammonia under influence of alkalis.

### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

### 10.5 Incompatible materials

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.

### 10.6 Hazardous decomposition products

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:  
Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia

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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

###### Product:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

###### Components:

###### **ammonium nitrate:**

Acute oral toxicity : LD50 (Rat): > 2.950 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : > 88,8 mg/l  
Method: No information available.

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg  
Method: OECD Test Guideline 402

##### Skin corrosion/irritation

###### Product:

Remarks: Prolonged contact with the product can result in skin irritation.

###### Components:

###### **ammonium nitrate:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: non-irritant

##### Serious eye damage/eye irritation

###### Product:

Remarks: Contact with eyes may cause irritation.

###### Components:

###### **ammonium nitrate:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: Irritant

##### Respiratory or skin sensitisation

###### Product:

Result: non-sensitizing

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### Components:

#### **ammonium nitrate:**

Result: Does not cause skin sensitisation.

### **Germ cell mutagenicity**

#### Product:

Genotoxicity in vitro : Remarks: Contains no hazardous ingredients according to GHS

### Components:

#### **ammonium nitrate:**

Genotoxicity in vitro : Method: OECD Test Guideline 471  
Result: negative

### **Carcinogenicity**

#### Product:

Remarks: Contains no ingredient listed as a carcinogen

### Components:

#### **ammonium nitrate:**

Species: Rat

Remarks: Animal testing did not show any carcinogenic effects.

### **Reproductive toxicity**

#### Product:

Effects on fertility :  
Remarks: Contains no ingredient listed as toxic to reproduction

Effects on foetal development : Remarks: Contains no ingredient listed as toxic to reproduction

### Components:

#### **ammonium nitrate:**

Effects on fertility : Species: Rat

Remarks: Animal testing did not show any effects on fertility.

Effects on foetal development : Species: Rat  
Remarks: Did not show teratogenic effects in animal experiments.



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### STOT - single exposure

**Product:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

### STOT - repeated exposure

**Product:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### Repeated dose toxicity

**Components:**

**ammonium nitrate:**

Species: Rat  
NOAEL: > 1.500 mg/kg  
Application Route: Oral  
Exposure time: 28 d

Species: Rat  
NOAEL: = 256 mg/kg  
Application Route: Oral  
Exposure time: 52 w  
Method: OECD Test Guideline 453

Species: Rat  
NOAEL: >= 185 mg/kg  
Application Route: by inhalation  
Exposure time: 2 w  
Method: Repeated Dose Inhalation Toxicity: 28-day or 14-day Study.

### Experience with human exposure

**Product:**

General Information : If swallowed danger of methemoglobin formation.

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## SECTION 12: Ecological information

### 12.1 Toxicity

**Product:**

Toxicity to fish : (Cyprinus carpio (Carp)): 422 mg/l  
Exposure time: 48 h  
Test Type: LC50

Toxicity to algae : No observed effect concentration (Desmodesmus subspicatus (green algae)): 83 mg/l

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Exposure time: 168 h

### Components:

#### **ammonium nitrate:**

- Toxicity to fish : LC50 (Fish): > 100 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 490 mg/l  
Exposure time: 48 h
- LC50 : 490 mg/l
- Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 1.700 mg/l  
Exposure time: 10 d

## 12.2 Persistence and degradability

### Components:

#### **ammonium nitrate:**

- Biodegradability : Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

## 12.3 Bioaccumulative potential

### Product:

- Bioaccumulation : Remarks: Accumulation in organisms is expected.

### Components:

#### **ammonium nitrate:**

- Bioaccumulation : Remarks: Bioaccumulation is unlikely.
- Partition coefficient: n-octanol/water : log Pow: -3,1

## 12.4 Mobility in soil

### Product:

- Mobility : Remarks: Groundwater contamination is unlikely.

## 12.5 Results of PBT and vPvB assessment

### Product:

- Assessment : Remarks: Not applicable

## 12.6 Other adverse effects

### Product:

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Additional ecological information : Do not flush into surface water or sanitary sewer system. Disposal via sewage water treatment plants may cause impairment of the nitrification activity of the activated sludge.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Product : Fertilizer  
Check if agriculture use is possible.

Contaminated packaging : Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

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### SECTION 14: Transport information

#### 14.1 UN number

Not regulated as a dangerous good

#### 14.2 UN proper shipping name

Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

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 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not relevant

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### SECTION 15: Regulatory information

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

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

Other regulations : TRGS 511 'Ammonium nitrate'

#### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

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### SECTION 16: Other information

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### Full text of H-Statements

H272 : May intensify fire; oxidizer.  
H319 : Causes serious eye irritation.

### Full text of other abbreviations

Eye Irrit. : Eye irritation  
Ox. Sol. : Oxidizing solids

(Q)SAR - (Quantitative) Structure Activity Relationship; 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; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; 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; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; 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; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; 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; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

### 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.

DE / EN

**Material Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006

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