

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

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

1.1 Product identifier

Trade name : NovaTec® One
UFI : A2DM-N01N-400Y-W71A

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
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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2	H319: Causes serious eye irritation.
Reproductive toxicity, Category 2	H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H319 Causes serious eye irritation.
Precautionary statements	:	Prevention: P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Response: P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/ physician.

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Fertilizer
Chemical reaction medium
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	>= 1 - <= 10

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

1H-Pyrazole, 3,4-dimethyl-, phosphate (1:1)	202842-98-6 424-640-9 01-0000017109-71-0002	Acute Tox. 4; H302 Eye Dam. 2; H319 Repr. 2; H361fd STOT RE 2; H373	>= 15 - <= 30
---	---	--	---------------

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Take off immediately all contaminated clothing.
Wash contaminated clothing before re-use.
- If inhaled : Move to fresh air.
Consult a physician for severe cases.
- In case of skin contact : Wash off with soap and water.
If symptoms persist, call a physician.
- In case of eye contact : Immediately wash affected eyes for at least 15 minutes under
running water with eyelids held open, consult an eye specialist.
- If swallowed : Drink plenty of water.
Obtain medical attention.

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 symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : The product is not flammable.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : No information available.

5.3 Advice for firefighters

- Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

for firefighters

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Keep people away from and upwind of spill/leak.
In case of involuntary exposition of the product contact producer or supplier.

6.2 Environmental precautions

Environmental precautions : Do not let product enter drains.
Do not allow uncontrolled discharge of product into the environment.
Do not contaminate water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material and dispose of as hazardous waste.
Use neutralizing agents.
Clean thoroughly.
Flush with water.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Handle and open container with care.

Advice on protection against fire and explosion : No special precautions required.

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

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed. Keep away from heat. Keep away from direct sunlight.

Further information on stor- : Requirements for storage areas and containers No special

according to Regulation (EC) No. 1907/2006



Revision Date:
22.07.2022

7.3 Specific end use(s)

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

8.1 Control parameters

Substance name	End Use	Exposure routes	Potential health effects	Value
ammonium nitrate	Workers	Inhalation	Long-term systemic effects	36 mg/m3
	Workers	Skin contact	Long-term systemic effects	5,12 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	2,56 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	8,9 mg/m3
	Consumers	Skin contact, Ingestion	Long-term systemic effects	2,56 mg/kg bw/day

Substance name	Environmental Compartment	Value
ammonium nitrate	Sewage treatment plant	18 mg/l

Eye protection	: Tightly fitting safety goggles
Hand protection	
Remarks	: Protective gloves complying with 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. The exact break through time can be obtained from the protective glove producer and

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

this has to be observed.

- Skin and body protection : Protective suit
- Respiratory protection : respiratory protection only if aerosol or dust is formed.
- Protective measures : Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

- General advice : Do not let product enter drains.
Do not allow uncontrolled discharge of product into the environment.
Do not contaminate water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state : liquid
- Colour : various
- Odour : very faint
- pH : ca. 4, (20 °C)
- Melting point/range : No data available
- Boiling point/boiling range : > 100 °C
- Flash point : Not applicable
- Density : ca. 1,07 g/cm³ (20 °C)
- Solubility(ies)
Water solubility : completely miscible
- Decomposition temperature : No decomposition if stored and applied as directed.

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazardous reactions if stored and handled as prescribed/indicated.

10.4 Conditions to avoid

Conditions to avoid : Do not allow evaporation to dryness.

10.5 Incompatible materials

Materials to avoid : Incompatible with strong acids and bases.

10.6 Hazardous decomposition products

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
ammonia
Nitrogen oxides (NO_x)

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

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

Acute oral toxicity : LD50 (Rat): 200 - 2.000 mg/kg
Method: Tested according to Directive 92/69/EEC.
Remarks: The product was not tested. The statement was derived from products of similar structure and composition.

Acute inhalation toxicity : LC50 (Rat): > 5,5 mg/l
Method: OECD Test Guideline 403

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

Remarks: calculated

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

ammonium nitrate:

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

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

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

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

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

Respiratory or skin sensitisation

Product:

Remarks: None known.

Components:

ammonium nitrate:

Result: Does not cause skin sensitisation.

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

Test Type: Maximisation Test (GPMT)
Species: Guinea pig
Method: OECD Test Guideline 406

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

ammonium nitrate:

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

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

Germ cell mutagenicity- Assessment : Animal experiments showed mutagenic and teratogenic effects.

Carcinogenicity

Components:

ammonium nitrate:

Species: Rat

Remarks: Animal testing did not show any carcinogenic effects.

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

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

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.

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

Reproductive toxicity - Assessment : In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.
May damage fertility. Suspected of damaging the unborn child.

Repeated dose toxicity

Components:

ammonium nitrate:

Species: Rat

NOAEL: > 1.500 mg/kg

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

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.

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

Remarks: The substance may cause damage to the liver after repeated ingestion of high doses, as shown in animal studies.

The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : (zebra fish): > 100 mg/l
Exposure time: 96 h
Test Type: LC50

Toxicity to algae : (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: flow-through test

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

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

Toxicity to fish : (zebra fish): > 100 mg/l

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

Exposure time: 96 h
Test Type: LC50
Method: OECD Test Guideline 203

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
- Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
- Toxicity to bacteria :
Remarks: Disposal via sewage water treatment plants may cause impairment of the nitrification activity of the activated sludge.
- Toxicity to fish (Chronic toxicity) : NOEC: > 8,7 mg/l
Species: other
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 25 mg/l
Species: Daphnia magna (Water flea)

12.2 Persistence and degradability

Components:

ammonium nitrate:

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

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

- Biodegradability : Remarks: Inherently biodegradable.
According to the results of tests of biodegradability this product is not readily biodegradable.

12.3 Bioaccumulative potential

Components:

ammonium nitrate:

- Bioaccumulation : Remarks: Bioaccumulation is unlikely.

- Partition coefficient: n-octanol/water : log Pow: -3,1

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

- Bioaccumulation : Species: Pimephales sp.
Exposure time: 14 d
Bioconcentration factor (BCF): 1,2
Method: Bioaccumulation: Flow-through Fish Test.
Remarks: Does not significantly accumulate in organisms.

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

The product was not tested. The statement was derived from products of similar structure and composition.

12.4 Mobility in soil

Components:

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

Distribution among environmental compartments : Remarks: Because of the water solubility, part of the product will dissolve.

12.5 Results of PBT and vPvB assessment

Components:

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

Assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT)..

12.6 Other adverse effects

Product:

Additional ecological information : Do not flush into surface water or sanitary sewer system. Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Must not be disposed together with household garbage. Do not allow product to reach sewage system. Check if agriculture use is possible. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging : Observe national and local legal requirements. Observe national and local legal requirements. Suitable cleaning agents
Suitable cleaning agents
Water
Cleaning agent

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

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3
Date of last issue: 08.02.2021

Revision Date:
22.07.2022

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

SECTION 15: Regulatory information

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

Water contaminating class : WGK 3 highly water endangering
(Germany)

Other regulations : Handle in accordance with good industrial hygiene and safety practice.

This product is subject to Regulation (EU) 2019/1148; suspicious transactions, disappearance or theft of the product must be reported to the relevant authority.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H272 : May intensify fire; oxidizer.
H302 : Harmful if swallowed.
H319 : Causes serious eye irritation.
H361fd : Suspected of damaging fertility. Suspected of damaging the unborn child.
H373 : May cause damage to organs through prolonged or repeated exposure.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Ox. Sol. : Oxidizing solids
Repr. : Reproductive toxicity
STOT RE : Specific target organ toxicity - repeated exposure

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

NovaTec® One



Version: 1.3

Date of last issue: 08.02.2021

Revision Date:

22.07.2022

(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