

Rasenfloranid mit Unkrautvernichter

Version: 2.4

Revision Date:
08.02.2021

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

1.1 Product identifier

Trade name : Rasenfloranid mit Unkrautvernichter

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

Use of the Sub-
stance/Mixture : Pesticide

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

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)

Supplemental Hazard Statements	: EUH208	Contains 2,4-D. May produce an allergic reaction.
	: EUH208	Contains urea-formaldehyde condensate. May produce an allergic reaction.
	: EUH401	To avoid risks to man and the environment, comply with the instructions for use.
Further information	: German "Hazardous Substances" legislation (Ge- fahrstoffverordnung) appendix I, No. 5 (Ammonium Nitrate group C III)	

2.3 Other hazards

None known.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
dimethylammonium 2,4-dichlorophenoxyacetate	2008-39-1 217-915-8	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 2; H411	<= 1
3,6-dichloro-o-anisic acid, compound with dimethylamine (1:1)	2300-66-5 218-951-7	Eye Irrit. 2; H319 Aquatic Chronic 3; H412	<= 0,15
ammonium nitrate	6484-52-2 229-347-8 01-2119490981-27-XXXX	Ox. Sol. 3; H272 Eye Irrit. 2; H319	<= 15
Urea, polymer with formaldehyde	9011-05-6		<= 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : If breathed in, move person into fresh air.
If symptoms persist, call a physician.
Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.
In case of lung irritation, first treatment with dexametason aerosol (spray).
Obtain medical attention.

In case of skin contact : Wash off 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 swallowed : Clean mouth with water and drink afterwards plenty of water.

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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 : Water

Unsuitable extinguishing media : Foam
Dry chemical
Carbon dioxide (CO₂)
Sand

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Can decompose at above 100 °C. Thermal decomposition products:
Isobutyraldehyd
Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia
chlorine

5.3 Advice for firefighters

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

Further information : 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 : No special precautions required.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

6.4 Reference to other sections

For personal protection see section 8.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on protection against fire and explosion : The product is not flammable. Keep away from sources of ignition - No smoking. Keep away from combustible materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Risk of explosion if heated under confinement.

Hygiene measures : 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 : When stored loose do not mix with other fertilizers. Store well away from other substances. Keep away from direct sunlight. Protect against heat. Protect from contamination. Protect from moisture.

Storage class (TRGS 510) : 5.1C, Ammonium nitrate and ammonium nitrate containing preparations

7.3 Specific end use(s)

Specific use(s) : Not relevant

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
dimethylammonium 2,4-dichlorophenoxyacetate	2008-39-1	(Inhalable fraction)	1 mg/m ³	DE TRGS 900
Peak-limit: excursion factor (category)	8;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission), Risk of percutaneous absorption of amine-formulations and esters, with the exception of the acid., Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

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
ammonium nitrate	Workers	Inhalation	Long-term systemic	36 mg/m ³

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			effects	
	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/m ³
	Consumers	Skin contact, Ingestion	Long-term systemic effects	2,56 mg/kg bw/day

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

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

8.2 Exposure controls

Personal protective equipment

- Eye protection : In case of dust formation:
Tightly fitting safety goggles
- Hand protection
Remarks : Impervious gloves
- Skin and body protection : Wearing of closed work clothing is recommended.
- Respiratory protection : respiratory protection only if aerosol or dust is formed.

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 : granular
- Colour : beige
- Odour : characteristic, amine-like
- Odour Threshold : No data available
- Melting point/range : No data available
- Boiling point/boiling range : Not applicable
- Flash point : Not applicable

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Evaporation rate	: Not applicable
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Relative density	: Not applicable
Bulk density	: ca. 1.000 kg/m ³
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 130 °C To avoid thermal decomposition, do not overheat.
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not considered an oxidizing substance

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

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 alkalies.

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10.4 Conditions to avoid

Conditions to avoid : Keep away from heat and sources of ignition.

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 : Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia
chlorine
Isobutyraldehyd

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

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

Components:

dimethylammonium 2,4-dichlorophenoxyacetate:

Acute oral toxicity : LD50 (Rat, female): 764 mg/kg
Method: Acute Oral Toxicity.

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 2.115 mg/kg

3,6-dichloro-o-anisic acid, compound with dimethylamine (1:1):

Acute inhalation toxicity : LC50 (Rat): 4,46 mg/l
Exposure time: 4 h

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

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

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Skin corrosion/irritation

Product:

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

Components:

ammonium nitrate:

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

Serious eye damage/eye irritation

Product:

Species: Rabbit
Method: OECD Test Guideline 405
Result: non-irritant

Components:

ammonium nitrate:

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

Respiratory or skin sensitisation

Product:

Remarks: May cause sensitisation of susceptible persons by skin contact.

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

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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: No toxicity 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.

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:

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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.

Further information

Product:

Remarks: Danger of methaemoglobin formation.
The product was not tested. The statement was derived from products of similar structure and composition.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: LC50
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): > 100 mg/l
Exposure time: 48 h
Method: Directive 84/449/EEC, C.2

Toxicity to algae : EC50 (Scenedesmus subspicatus): > 100 mg/l
Exposure time: 72 h
Method: DIN 38412

Toxicity to bacteria : EC0 (Pseudomonas putida): ca. 640 mg/l
Exposure time: 16 h
Test Type: activated sludge

Components:

dimethylammonium 2,4-dichlorophenoxyacetate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.170 mg/l
Exposure time: 96 h

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LC50 (Fish): 168,4 mg/l
Exposure time: 96 h

Toxicity to daphnia and other
aquatic invertebrates : EC50 (Daphnia magna): 4 mg/l
Exposure time: 48 h

EC50 (Daphnia (water flea)): 10 - 100 mg/l
Exposure time: 48 h

Toxicity to algae : (unspecified algae): 59,9 mg/l
Exposure time: 72 h

3,6-dichloro-o-anisic acid, compound with dimethylamine (1:1):

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other
aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 97 mg/l
Exposure time: 48 h

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 2,16
mg/l

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

Urea, polymer with formaldehyde:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other
aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removabil-
ity : DOC reduction
ca. 85 %

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Method: OECD 301E/92/69/EWG, C.4-B

Remarks: The product can be degraded by abiotic (e.g. chemical or photolytic) processes.

Components:

ammonium nitrate:

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

Urea, polymer with formaldehyde:

Biodegradability : Remarks: The product works in the soil as fertilizer and is diminished in a few weeks.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

dimethylammonium 2,4-dichlorophenoxyacetate:

Bioaccumulation : Bioconcentration factor (BCF): 10

Partition coefficient: n-octanol/water : log Pow: -0,83

3,6-dichloro-o-anisic acid, compound with dimethylamine (1:1):

Partition coefficient: n-octanol/water : log Pow: 0,55

ammonium nitrate:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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

Urea, polymer with formaldehyde:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: Mobile in soils

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12.5 Results of PBT and vPvB assessment

Product:

Assessment : Remarks: No data available

12.6 Other adverse effects

Product:

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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Check if agriculture use is possible.
Contact manufacturer.

Contaminated packaging : Offer rinsed packaging material to local recycling facilities.

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

SECTION 15: Regulatory information

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

Water contaminating class : WGK 1 slightly water endangering

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(Germany)

Other regulations : TRGS 511 'Ammonium nitrate'

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.
H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Chronic : Chronic aquatic toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Ox. Sol. : Oxidizing solids
Skin Sens. : Skin sensitisation

(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; EC_x - Concentration associated with x% response; EL_x - Loading rate associated with x% response; EmS - Emergency Schedule; ErC_x - 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

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- 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.

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