

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830



Article No.: RSM007 grotanol FF 1 N
Print date: 16.07.2020 Revision date: 18.06.2020
Version: 1.3 Issue date: 16.03.2020

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

1.1. Product identifier

Article No. (manufacturer/supplier): RSM007
Trade name/designation grotanol FF 1 N

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

Relevant identified uses

Preservative
Industrial use

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Vink Chemicals GmbH & Co. KG

Eichenhöhe 29

D-21255 Kakenstorf

Telephone: +49 (0) 4186 - 88797 0

Telefax: +49 (0) 4186 - 88797 10

Department responsible for information:

Mr. Branko Ulaga

E-mail (competent person)

sds@vink-chemicals.com

1.4. Emergency telephone number

Emergency telephone number

National Poisons Information Service

0844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Skin Irrit. 2 / H315

Skin corrosion/irritation

Causes skin irritation.

Eye Dam. 1 / H318

Serious eye damage/eye irritation

Causes serious eye damage.

Skin Sens. 1 / H317

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Aquatic Acute 1 / H400

Hazardous to the aquatic environment

Very toxic to aquatic organisms.

Aquatic Chronic 2 / H411

Hazardous to the aquatic environment

Toxic to aquatic life with long lasting effects.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Danger

Hazard statements

H315

Causes skin irritation.

H318

Causes serious eye damage.

H317

May cause an allergic skin reaction.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P280

Wear protective gloves and eye/face protection.

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.

Hazard components for labelling

1,2-benzisothiazol-3(2H)-one

Supplemental hazard information

not applicable

2.3. Other hazards

No information available.

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SECTION 3: Composition / information on ingredients

3.2. Mixtures

Description Biocide

Hazardous ingredients

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No. INDEX No.	REACH No. Designation classification: // Remark	Wt %
220-120-9 2634-33-5 613-088-00-6	1,2-benzisothiazol-3(2H)-one Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Acute 1 H400 / Aquatic Chronic 2 H411 Specific concentration limit (SCL): Skin Sens. 1 H317 >= 0,05	1 - 2,5
219-145-8 2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine Acute Tox. 3 H301 / Skin Corr. 1A H314 / Eye Dam. 1 H318 / STOT RE 2 H373 / Aquatic Acute 1 H400 (M = 10) / Aquatic Chronic 1 H410 (M = 1)	0,5 - 1
215-181-3 1310-58-3 019-002-00-8	potassium hydroxide Acute Tox. 4 H302 / Skin Corr. 1A H314 / Eye Dam. 1 H318 / Met. Corr. 1 H290 Specific concentration limit (SCL): Skin Corr. 1A H314 >= 5 / Skin Corr. 1B H314 >= 2 / Skin Irrit. 2 H315 >= 0,5 / Eye Irrit. 2 H319 >= 0,5	0,5 - 1
223-296-5 3811-73-2	2-Pyridinethiol-1-oxide sodium salt Acute Tox. 4 H302 / Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2A H319 / Aquatic Acute 1 H400 (M = 100) / Aquatic Chronic 1 H410 (M = 10)	< 0,5
203-961-6 112-34-5	2-(2-butoxyethoxy)ethanol Eye Irrit. 2 H319	5 - 10
191549-88-9	Alcohols, C13-C15-branched and linear, butoxylated, ethoxylated Acute Tox. 4 H302 / Eye Irrit. 2 H319 / Aquatic Chronic 3 H412	2,5 - 5

Additional information

Full text of classification: see section 16

Labelling for contents according to regulation (EC) No. 648/2004:

< 5 % non ionic tensid

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners. Consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Seek medical advice immediately.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Do not breathe gas/fumes/vapour/spray.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device.

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Use only with sufficient ventilation. Refer to chapter 8. : Exposure controls / Personal protection

Further information

Respiratory protection necessary at: aerosol or mist formation

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep/Store only in original container.

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSIVO).

Further information on storage conditions

Take care of instructions on label. Protect from heat and direct sunlight. Protect from frost.

7.3. Specific end use(s)

No measures required.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

potassium hydroxide

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STEL: 2 mg/m³

Additional information

TWA : long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

8.2. Exposure controls

Personal protection equipment

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values. Use only respiratory protection equipment with CE-symbol including four digit test number. Combination filtering device (EN 14387) Filter type: ABEK

Hand protection

Wear protective gloves. Suitable material: Nitrile, Butyl caoutchouc (butyl rubber). Recommended glove articles EN ISO 374

Eye/face protection

Wear eye glasses with side protection according to EN 166.

Body protection

Suitable protective clothing: Protective clothing. type 6 DIN EN 13034

Protective measures

Avoid contact with eyes and skin.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state:	Liquid
Appearance:	Liquid
Colour:	yellow

Odour:	characteristic
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Odour threshold:	not applicable
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pH at 20 °C:	9
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Initial boiling point and boiling range:	100 °C
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Flash point:	> 100 °C
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Evaporation rate:	not applicable
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flammability

Burning time (s):	not applicable
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Upper/lower flammability or explosive limits:

Lower explosion limit:	not applicable
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Upper explosion limit:	not applicable
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Vapour pressure at 20 °C:	not applicable
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Vapour density:	not determined
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Relative density:

Density at 20 °C:	1,022 g/cm ³
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Solubility(ies):

Water solubility (g/L) at 20 °C:	798
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Partition coefficient: n-octanol/water:	see section 12
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Auto-ignition temperature:	not applicable
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Decomposition temperature:	not applicable
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Viscosity at °C:	liquid
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Explosive properties:	not applicable
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Oxidising properties:	not applicable
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9.2. Other information

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No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

11.1. Information on toxicological effects

Acute toxicity

1,2-benzisothiazol-3(2H)-one
oral, LD50, Rat: 1193 mg/kg

2-Pyridinethiol-1-oxide sodium salt
oral, LD50, Rat: 1208 mg/kg
dermal, LD50, Rabbit: 1800 mg/kg
inhalative (vapours), LC50, Rat (4 h)

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
oral, LD50, Rat: 261 mg/kg 0 - 280 mg/kg
Method: OECD 401

Skin corrosion/irritation; Serious eye damage/eye irritation

Corrosive

Causes skin irritation.

Causes serious eye damage.

Respiratory or skin sensitisation

sensitising

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

STOT-single exposure; STOT-repeated exposure

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

Aspiration hazard

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

Practical experience/human evidence

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

Do not allow to enter into surface water or drains.

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12.1. Toxicity

Very toxic to aquatic organisms.

1,2-benzisothiazol-3(2H)-one

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 2,15 mg/l (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 2,9 mg/l (48 h)

2-Pyridinethiol-1-oxide sodium salt

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 0,0066 mg/l (96 h)

Daphnia toxicity, EC50, Daphnia magna: 0,022 mg/l (48 h)

Algae toxicity, ErC50, Selenastrum capricornutum: 0,46 mg/l

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 0,68 mg/l (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 0,073 mg/l (48 h)

Algae toxicity, ErC50, Pseudokirchneriella subcapitata

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

1,2-benzisothiazol-3(2H)-one

Fish toxicity, LC50 (96 h)

Algae toxicity, ErC50 (72 h)

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

Fish toxicity, LC50, Lepomis macrochirus (Bluegill): 0,45 mg/l (96 h)

Algae toxicity, ErC50, Desmodesmus subspicatus.: 0,012 mg/l (72 h)

Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 0,024 mg/l (21 day(s))

Algae toxicity, NOEC, Desmodesmus subspicatus.: 0,0069 mg/l (72 hour(s))

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way.

List of proposed waste codes/waste designations in accordance with EWC

160305* organic wastes containing hazardous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number

UN 3082

14.2. UN proper shipping name

Land transport (ADR/RID):

Environmentally hazardous substance, liquid, n.o.s.
(pyridine-2-thiol 1-oxide, natrium salt)

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Sea transport (IMDG):	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyridine-2-thiol 1-oxide, natrium salt)
Air transport (ICAO-TI / IATA-DGR):	Environmentally hazardous substance, liquid, n.o.s. (pyridine-2-thiol 1-oxide, natrium salt, (N,N-Bis (3-aminopropyl) dodecylamine))
14.3. Transport hazard class(es)	9
14.4. Packing group	III
14.5. Environmental hazards	*
Land transport (ADR/RID)	ENVIRONMENTALLY HAZARDOUS
Marine pollutant	p / pyridine-2-thiol 1-oxide, natrium salt
14.6. Special precautions for user	
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.	
Advices on safe handling: see parts 6 - 8	
Further information	
Land transport (ADR/RID)	
tunnel restriction code	-
in packages <= 5 litres	Kein Gut der Klasse 9
Sea transport (IMDG)	
EmS-No.	F-A, S-F
in packages <= 5 litres	not restricted 2.10.2.7
Air transport (ICAO-TI / IATA-DGR)	
in packages <= 5 litres	not restricted
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	
not applicable	

SECTION 15: Regulatory information

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

EU legislation

Restrictions of occupation:

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Regulation (EU) No. 528/2012 on biocides

biocidal product

biocide, active substance

1,2-benzisothiazol-3(2H)-one 15,47 g/kg

2-Pyridinethiol-1-oxide sodium salt 2,4 g/kg

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine 9 g/kg

Input 10-30 g/kg

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 158,3

National regulations

15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
219-145-8 2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	01-2119980592-29
215-181-3 1310-58-3	potassium hydroxide	01-2119487136-33

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SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Acute Tox. 3 / H301	Acute toxicity (oral)	Toxic if swallowed.
Skin Corr. 1A / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.
Met. Corr. 1 / H290	Corrosive to metals	May be corrosive to metals.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Eye Irrit. 2A / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Skin Irrit. 2	Skin corrosion/irritation	Calculation method.
Eye Dam. 1	Serious eye damage/eye irritation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
Aquatic Acute 1	Hazardous to the aquatic environment	Calculation method.
Aquatic Chronic 2	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

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Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version