

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.12.2021

Version number 3

Revision: 17.12.2021

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

- **1.1 Product identifier**
- **Trade name:** Grotanol FF 1 N
- **Article number:** 43440
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SERVA Electrophoresis GmbH
Carl-Benz-Str. 7
D-69115 Heidelberg
Tel.: +49 6221 13840-0
FAX: +49 6221 13840-10
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **1.4 Emergency telephone number:**
Medical Emergency Information in case of poisoning:
Poison Information Center Mainz - Phone: +49 (0) 6131 19240
(advisory service in German or English language)



SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Eye Dam. 1 H318 Causes serious eye damage.



Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS05, GHS07, GHS09
- **Signal word** Danger
- **Hazard-determining components of labelling:**
Isotridecanol, ethoxylated (>1<2,5 mol EO)
1,2-benzisothiazol-3(2H)-one
- **Hazard statements**
H315 Causes skin irritation.

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H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P310 Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

· 2.3 Other hazards**· Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Chemical characterisation: Mixtures**· **Description:** liquid microbiocidal system cleaner**· Dangerous components:**

CAS: 112-34-5 EINECS: 203-961-6	2-(2-butoxyethoxy)ethanol ⚠ Eye Irrit. 2, H319	5-15%
CAS: 9043-30-5 NLP: 500-027-2	Isotridecanol, ethoxylated (>1<2,5 mol EO) ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	2.5-7%
CAS: 111905-53-4	alcohols, C13-15-branched and linear, butoxylated ethoxylated ⚠ Acute Tox. 4, H302; ⚠ Eye Irrit. 2, H319; ⚠ Aquatic Chronic 3, H412	2.5-7%
CAS: 2634-33-5 EINECS: 220-120-9	1,2-benzisothiazol-3(2H)-one ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; ⚠ Skin Irrit. 2, H315; ⚠ Skin Sens. 1, H317	0.5-1.5%
CAS: 2372-82-9 EINECS: 219-145-8	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine ⚠ Acute Tox. 3, H301; ⚠ STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; ⚠ Aquatic Acute 1, H400; ⚠ Aquatic Chronic 1, H410	0.5-1.5%
CAS: 1310-58-3 EINECS: 215-181-3	potassium hydroxide ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302	0.5-1.5%
CAS: 3811-73-2 EINECS: 223-296-5	pyridine-2-thiol 1-oxide, sodium salt ⚠ Acute Tox. 3, H311; ⚠ Aquatic Acute 1, H400; ⚠ Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; ⚠ Acute Tox. 4, H332; ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319	0.1-0.2%

· **Additional information** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****· 4.1 Description of first aid measures**· **After inhalation** Supply fresh air; consult doctor in case of complaints.· **After skin contact**

Immediate wash with copious amounts of water and soap; rinse thoroughly; seek medical advice.

· **After eye contact**

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist immediately.

· **After swallowing**

Wash out mouth instantly. Drink copious amounts of water and provide fresh air. Call for doctor immediately.

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- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be formed, but not limited to:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Ensure adequate ventilation
Avoid contact with the eyes and skin.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed and store in dry conditions.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical systems:** No further data; see item 7.

· Components with limit values that require monitoring at the workplace:	
112-34-5 2-(2-butoxyethoxy)ethanol (5-15%)	
WEL	Short-term value: 101.2 mg/m ³ , 15 ppm
	Long-term value: 67.5 mg/m ³ , 10 ppm

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1310-58-3 potassium hydroxide (0.5-1.5%)WEL Short-term value: 2 mg/m³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

The usual precautionary measures should be adhered to when handling chemicals.

· **Breathing equipment:**

Short term filter device:

Filter ABEK/ P3

· **Protection of hands:**

Protective gloves.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies 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.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

· **Eye protection:** Tightly sealed goggles.

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Colour: yellowish

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value at 20 °C:** 9

· **Change in condition**

Melting point/freezing point: undetermined

Initial boiling point and boiling range: undetermined

· **Flash point:** >100 °C

· **Flammability (solid, gaseous)** Not applicable.

· **Decomposition temperature:** Not determined.

· **Self igniting:** Product is not selfigniting.

· **Explosive properties:** Not determined.

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· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density at 20 °C:	1.022 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	7.5 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No further relevant informations available.
- **10.4 Conditions to avoid** high temperatures
- **10.5 Incompatible materials:** Avoid contact with strong oxidizers and reducing agents.
- **10.6 Hazardous decomposition products:** In case of fire: See Section 5

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **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.

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SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Disposal must be made according to official regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

SECTION 14: Transport information

- | | |
|--|--|
| · 14.1 UN-Number | UN3082 |
| · ADR, IMDG, IATA | |
| · 14.2 UN proper shipping name | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyridine-2-thiol 1-oxide, sodium salt, N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine) |
| · ADR | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyridine-2-thiol 1-oxide, sodium salt, N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine) |
| · IMDG | MARINE POLLUTANT |
| · IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pyridine-2-thiol 1-oxide, sodium salt, N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine) |
| · 14.3 Transport hazard class(es) | |
| · ADR, IMDG, IATA | |
| | |
| · Class | 9 Miscellaneous dangerous substances and articles. |

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· Label	9
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: pyridine-2-thiol 1-oxide, sodium salt, N-(3-aminopropyl)- N-dodecylpropane-1,3-diamine Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT, N-(3-AMINOPROPYL)-N-DODECYLPROPANE-1,3-DIAMINE), 9, III

SECTION 15: Regulatory information

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

- Directive 2012/18/EU
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
NK	5-15

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

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H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** Product safety department

· **Contact:** +49 6221 13840-35

· **Abbreviations and acronyms:**

PBT: persistent, bioaccumulative, toxic substance (REACH)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

bw: body weight

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3