

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

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

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

· **1.1 Product identifier**

· **Product name:** Nitrate MR F10

· **Catalog number:** 00530849, 530840

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

· **Application of the substance / the preparation:** Reagent for water analysis

· **1.3 Details of the supplier of the safety data sheet**

· **Supplier:**

Tintometer GmbH
Schleefstraße 8-12
44287 Dortmund
Made in Germany
www.lovibond.com

phone: +49 (0)231 94510-0
e-mail: sales@lovibond.com

The Tintometer Limited
Lovibond® House
Sun Rise Way
Amesbury
Wiltshire SP4 7GR
United Kingdom

phone : +44 1980 664800
e-mail: SDS@lovibond.uk

· **Informing department:**

e-mail: sds@lovibond.com
Product Safety Department

· **1.4 Emergency telephone number:**

+44 1235 239670
Languages: English

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

· **Hazard pictograms**



· **Signal word** Warning

· **Hazard-determining components of labelling:**

sulphanilic acid

· **Hazard statements**

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

— GB —

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 1)

Precautionary statements

- P280 Wear protective gloves.
- P273 Avoid release to the environment.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P302+P352 IF ON SKIN: Wash with plenty of water.

· **2.3 Other hazards** No further relevant information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

Determination of endocrine-disrupting properties

The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients
3.2 Mixtures

· **Description:** Mixture of organic and inorganic compounds

Dangerous components:

CAS: 490-79-9 EINECS: 207-718-5	2,5-Dihydroxybenzoic acid ⚠ Acute Tox. 4, H302	10–20%
CAS: 7440-66-6 EINECS: 231-175-3 Index No: 030-001-01-9 Reg.nr.: 01-2119467174-37-XXXX	zinc powder - zinc dust (stabilized) ⚠ Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1)	0.25–<2.5%
CAS: 121-57-3 EINECS: 204-482-5 Index No: 612-014-00-X	sulphanilic acid ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	1–≤2.5%

· **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

· **General information** Instantly remove any clothing soiled by the product.

· **After inhalation** Supply fresh air; consult doctor in case of symptoms.

After skin contact

Instantly rinse with water.

If skin irritation or rash occurs: Get medical advice/attention.

After eye contact

Rinse opened eye for several minutes under running water (at least 15 min). If symptoms persist, consult doctor.

After swallowing

Rinse out mouth and then drink 1-2 glasses of water.

Seek medical treatment in case of complaints.

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

allergic reactions

irritations

after absorption:

gastric or intestinal trouble

sickness

gastric pain

diarrhoea

general feeling of sickness

cardiovascular disorders

· **Danger** risk of skin sensitization

· **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** Use fire fighting measures that suit the environment.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 2)

5.2 Special hazards arising from the substance or mixture

- The product is not combustible.
- Formation of toxic gases is possible during heating or in case of fire.
- Can be released in case of fire:
 - Nitrogen oxides (NO_x)
 - Phosphorus oxides (P_xO_x)
 - Sulphur oxides (SO_x)
 - Zinc oxide
 - Dipotassium oxide
 - Carbon monoxide (CO) and carbon dioxide (CO₂)

5.3 Advice for firefighters
Protective equipment:

- Wear self-contained breathing apparatus.
- Wear full protective suit.

Additional information

- Collect contaminated fire fighting water separately. It must not enter drains.
 - Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
 - Ambient fire may liberate hazardous vapours.
-

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel:

- Wear protective equipment. Keep unprotected persons away.
- Ensure adequate ventilation

Advice for emergency responders: Protective equipment: see section 8

6.2 Environmental precautions:

- Do not allow product to reach sewage system or water bodies.
- Inform respective authorities in case product reaches water or sewage system.

6.3 Methods and material for containment and cleaning up:

- Ensure adequate ventilation.
- Collect mechanically.
- Dispose of contaminated material as waste according to item 13.

6.4 Reference to other sections

- See Section 8 for information on personal protection equipment.
 - See Section 13 for information on disposal.
-

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: Prevent formation of dust.

Hygiene measures:

- Avoid contact with the skin.
- Take off immediately all contaminated clothing.
- Wash hands during breaks and at the end of the work.
- Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and containers: Store in cool location.

Information about storage in one common storage facility:

- Store away from flammable substances.
- Store away from oxidising agents.
- Store away from water.

Further information about storage conditions:

- Keep container tightly sealed.
- Protect from heat and direct sunlight.
- Protect from the effects of light.
- Store under dry conditions.
- Protect from humidity and keep away from water.

Recommended storage temperature: 20°C +/- 5°C

(Contd. on page 4)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 3)

- **7.3 Specific end use(s)** No further relevant information available.
-

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Recommended monitoring procedures:**
Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.
 - **Additional information:** The lists that were valid during the compilation were used as basis.
 - **8.2 Exposure controls**
 - **Engineering measures:**
Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.
 - **Individual protection measures, such as personal protective equipment**
Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.
 - **Eye/face protection**
Safety glasses
use against the effects of fumes / dust
Use safety glasses that have been tested and approved in accordance with government standards such as EN 166.
 - **Hand protection**
Protective gloves.
Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
 - **Material of gloves**
nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.11 mm
 - **Penetration time of glove material**
Value for the permeation: Level = 1 (< 10 min)
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - **Other skin protection (body protection):** Protective work clothing.
 - **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
 - **Recommended filter device for short term use:** Combination filter B-P2
 - **Environmental exposure controls** Do not allow product to reach sewage system or water bodies.
-

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **Physical state** Solid.
- **Form:** Powder
- **Colour:** Grey
- **Odour:** Odourless
- **Odour threshold:** Not applicable.
- **Melting point/Freezing point:** Not determined.
- **Boiling point or initial boiling point and boiling range** Not determined.
- **Flammability** The product is not combustible.
- **Explosive properties:** Product is not explosive.
- **Lower and upper explosion limit**
- **Lower:** Not applicable.
- **Upper:** Not applicable.
- **Flash point:** Not applicable.
- **Auto-ignition temperature:** Not applicable.
- **Decomposition temperature:** Not determined.
- **pH (30 g/l) at 20°C** 3.2
- **Kinematic viscosity** Not applicable (solid).
- **Solubility**
- **Water:** Partially insoluble.

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 4)

· Partition coefficient n-octanol/water (log value)	Not applicable (mixture).
· Vapour pressure:	Not applicable (solid).
· Density and/or relative density	
· Density at 20°C:	~2.21 g/cm ³
· Relative density:	Not determined.
· Relative gas density	Not applicable (solid).
· Particle characteristics	Not determined.
· 9.2 Other information	
· Information with regard to physical hazard classes	
· Corrosive to metals	Void
· Other safety characteristics	
· Oxidising properties:	none
· Additional information	
· Solids content:	100 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section 10.3
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
 Reacts with acids, alkalis and oxidizing agents
 Reacts with peroxides
 Reacts with halogenated compounds
 Reacts with moist air
- **10.4 Conditions to avoid**
 Heating (decomposition)
 Exposure to moisture.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
 (with water)
 Hydrogen
 In case of fire: see section 5.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:		
CAS: 490-79-9 2,5-Dihydroxybenzoic acid		
Oral	LD50	800 mg/kg (rat) (Merck)
CAS: 7440-66-6 zinc powder - zinc dust (stabilized)		
Oral	LD50.	>2000 mg/kg (rat) (Registrant, Echa: limit test, no mortality observed)
CAS: 121-57-3 sulphanilic acid		
Oral	LD50	12300 mg/kg (rat) (IUCLID)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· Information on components:		
CAS: 121-57-3 sulphanilic acid		
Irritation of skin	OECD 404	(rabbit: slight irritation) (IUCLID)
Irritation of eyes	OECD 405	(rabbit: irritation)

- **Respiratory or skin sensitisation** May cause an allergic skin reaction.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 5)

Information on components:	
CAS: 121-57-3 sulphanilic acid	
Sensitisation	OECD 406 (guinea pig: positive)

- **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.

· **Information on components:**

- CAS 7440-66-6: Did not show teratogenic effects in animal experiments (IUCLID).
 CAS 7440-66-6: Did not show carcinogenic effects in animal experiments (IUCLID).
 CAS 7440-66-6: No impairment of reproductive performance in animal experiments (IUCLID).

CAS: 121-57-3 sulphanilic acid	
OECD 471	(negative) (NTP, Salmonella typhimurium)

- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

· **Additional toxicological information:**

The following applies to aromatic amines in general: systemic effect - methaemoglobinaemia with headache, cardia dysrhythmia, drop in blood pressure, dyspnoea, spasm, principal symptom: cyanosis (blue discoloration of the blood)

· **11.2 Information on other hazards**

- **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

· **Other information**

According to the information available to us, the chemical, physical and toxicological properties of the substances mentioned in Chapter 3 have not been thoroughly investigated.

SECTION 12: Ecological information

· **12.1 Toxicity**

Aquatic toxicity:	
CAS: 7440-66-6 zinc powder - zinc dust (stabilized)	
LC50	0.068 mg/l/48h (Daphnia magna)
EC50	0.356 mg/l/48h (Daphnia magna) (US-EPA)
NOEC	0.169 mg/l/96h (fish) (30d) (Registrant, ECHA: Cottus bairdii)
NOEC	0.0727 mg/l (Daphnia magna) (21 d) (ECHA, Registrant)
EC50	0.106 mg/l/72h (Pseudokirchneriella subcapitata) (Merck)
LC50	0.238–0.269 mg/l/96h (fathead minnow) (Merck)
CAS: 121-57-3 sulphanilic acid	
EC50	85.7 mg/l/48h (Daphnia magna) (IUCLID)
IC50	91 mg/l/72h (Desmodesmus subspicatus) (IUCLID)
LC50	100.4 mg/l/96h (fathead minnow) (IUCLID)

· **Other information:**

Toxic for fish:
 Zn > 0.1 mg/l

12.2 Persistence and degradability	
CAS: 121-57-3 sulphanilic acid	
OECD 301 B	31 % / 28 d (not readily biodegradable) (CO2 Evolution Test)

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 6)

· 12.3 Bioaccumulative potential	
CAS: 490-79-9 2,5-Dihydroxybenzoic acid	
log Pow	1.74 (.) (experimental)
CAS: 121-57-3 sulphanilic acid	
log Pow	-2.298 (.)
· 12.4 Mobility in soil No further relevant information available.	
· 12.5 Results of PBT and vPvB assessment	
This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.	
· 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.	
· 12.7 Other adverse effects	
Avoid transfer into the environment.	
Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of water supplies.	
· Water hazard:	
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.	
Danger to drinking water if even extremely small quantities leak into soil.	

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods	
· Recommendation	
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste.	
· European waste catalogue	
16 05 06*	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals
· Uncleaned packagings:	
· Recommendation: Disposal must be made according to official regulations.	

SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR, IMDG, IATA	Void
· 14.2 UN proper shipping name	
· ADR, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	
	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
· Poisons Act UK	
· Regulated explosives precursors	
None of the ingredients is listed.	

(Contd. on page 8)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 7)

· Regulated poisons
None of the ingredients is listed.
· Reportable explosives precursors
None of the ingredients is listed.
· Reportable poisons
None of the ingredients is listed.
· Regulation (EU) 2019/1148 on the marketing and use of explosives precursors not regulated
· Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)
None of the ingredients is listed.
· Regulation (EC) No 1334/2000 setting up a Community regime for the control of exports of dual-use items and technology:
None of the ingredients is listed.
· Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.
· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.
· Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:
None of the ingredients is listed.
· REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)
None of the ingredients is listed.
· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)
None of the ingredients is listed.
· Substances of very high concern (SVHC) according to REACH, Article 57 This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).
· Substances of very high concern (SVHC) according to UK REACH This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).
· Directive 2012/18/EU (SEVESO III):
· Named dangerous substances - ANNEX I None of the ingredients is listed.
· Information about limitation of use: Employment restrictions concerning young persons must be observed (94/33/EC).
· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· **Training hints** Provide adequate information, instruction and training for operators.

· **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

· **Abbreviations and acronyms:**

OECD: Organisation for Economic Co-operation and Development

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure

EC50: half maximal effective concentration

IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

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

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

(Contd. on page 9)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.11.2023

Version number 1

Revision: 14.11.2023

Product name: Nitrate MR F10

(Contd. of page 8)

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources

Data arise from safety data sheets, reference works and literature.

ECHA: European Chemicals Agency <http://echa.europa.eu>

IUCLID (International Uniform Chemical Information Database)

GB