



Safety Data Sheet

according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Revision date: 18.11.2021 Product code: 2107169 Page 1 of 8

Creation date: 09.02.2005

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

1.1. Product identifier

21071-69 NitriVer 3 Nitrite Reagent

UFI: 6RR3-RDJE-U004-JC9V

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

HACH LANGE GmbH Company name: Street: Willstätterstr. 11 Place: D-40549 Düsseldorf Telephone: +49 (0)211 5288-383 e-mail: SDS@hach.com Internet: www.de.hach.com Responsible Department: HACH LANGE Ltd.

5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency 1.4. Emergency telephone

service number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Serious eye damage/eye irritation: Eye Dam. 1 Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

Causes serious eye damage. May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Sodium Sulfanilate Potassium disulfate

Signal word: Danger

Pictograms:







according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Revision date: 18.11.2021 Product code: 2107169 Page 2 of 8

Creation date: 09.02.2005

Hazard statements

H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements

P272 Contaminated work clothing should not be allowed out of the workplace.

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

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.

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

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P310 Immediately call a POISON CENTER/doctor.

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

Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | | |
|------------|---|-------------------|------------------|-------|--|
| | EC No | Index No | REACH No | | |
| | GHS Classification | | | | |
| 7778-77-0 | Potassium dihydrogen phosphate | | | <80 % | |
| | 231-913-4 | | 01-2119490224-41 | | |
| 7790-62-7 | Potassium disulfate | | | <9 % | |
| | 232-216-8 | | 01-2119987095-26 | | |
| | Skin Corr. 1A, Eye Dam. 1; H314 H | 1318 | | | |
| 515-74-2 | Sodium Sulfanilate | | <9 % | | |
| | 208-208-5 | | | | |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. | 1; H315 H319 H317 | | | |
| 129-96-4 | Chromotropic acid disodium salt | | <2 % | | |
| | 204-972-9 | | | | |
| | Skin Irrit. 2, Eye Irrit. 2, STOT SE 3 | ; H315 H319 H335 | | | |
| 36679-96-6 | CDTA Trisodium Salt | | _ | <2 % | |
| | | | | | |
| | Skin Irrit. 2, Eye Irrit. 2; H315 H319 | | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures



Safety Data Sheet

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Revision date: 18.11.2021 Product code: 2107169 Page 3 of 8

Creation date: 09.02.2005

General information

Take off contaminated clothing and shoes immediately. Show this safety data sheet to the doctor in attendance

After inhalation

Move to fresh air. Consult a physician.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

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

Irritation and corrosion

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

None known.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours. In the event of fire the following can be released: Carbon monoxide, Carbon dioxide (CO2), Oxides of phosphorus

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional 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

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Do not breathe vapours/dust.





according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Revision date: 18.11.2021 Product code: 2107169 Page 4 of 8

Creation date: 09.02.2005

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry, cool and well-ventilated place.

Storage temperature: 10° - 25° C.

Protect against light.

Keep locked up or in an area accessible only to qualified or authorised persons.

7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

None known.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: powder Colour: white Odour: none

pH-Value (at 20 °C): 3,2 (5 % solution)

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

no data available

Softening point:

not applicable

Pour point:

not applicable

Flash point:

not applicable





Safety Data Sheet

according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Revision date: 18.11.2021 Product code: 2107169 Page 5 of 8

Creation date: 09.02.2005

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

not applicable

Lower explosion limits:

Upper explosion limits:

Iquition temperature:

not applicable
not applicable

Auto-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: not applicable

Oxidizing properties

not applicable

Vapour pressure:

Density (at 20 °C):

Bulk density:

No data available

Water solubility:

soluble

(at 20 °C)

Solubility in other solvents

no data available

Partition coefficient: not applicable Viscosity / dynamic: not applicable Viscosity / kinematic: not applicable Flow time: not applicable not applicable Vapour density: Evaporation rate: not applicable Solvent separation test: not applicable Solvent content: not applicable

9.2. Other information

Solid content: no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

Protect from moisture.

10.5. Incompatible materials

None known.





according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Revision date: 18.11.2021 Product code: 2107169 Page 6 of 8

Creation date: 09.02.2005

10.6. Hazardous decomposition products

Decomposition products: Oxides of phosphorus, Carbon monoxide, Carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

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

No data is available on the product itself.

| CAS No | Chemical name | | | | | |
|-----------|--------------------------------|---------------------|---------|--------|--------|--|
| | Exposure route | Dose | Species | Source | Method | |
| 7778-77-0 | Potassium dihydrogen phosphate | | | | | |
| | oral | LD50 >2000 mg/kg | rat | | | |
| | dermal | LD50 4640 mg/kg | rabbit | | | |

Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Skin corrosion: Not applicable.

Test Method: Animal studies, rabbit skin

Sensitising effects

May cause an allergic skin reaction. (Sodium Sulfanilate)

Carcinogenic/mutagenic/toxic effects for reproduction

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

Contains no ingredient listed as a carcinogen

STOT-single exposure

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

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

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

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

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

Specific effects in experiment on an animal

Chromatropic Acid: LD50/oral/rat = >5000mg/kg

Potassium Phosphate Monobasic: LD50/oral/rat =7100mg/kg

Potassium Pyrosulfate: LD50/oral/rat =2340mg/kg

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

No data is available on the product itself. Do not flush into surface water or sanitary sewer system.

12.2. Persistence and degradability

No data is available on the product itself.





according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Revision date: 18.11.2021 Product code: 2107169 Page 7 of 8

Creation date: 09.02.2005

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

In accordance with local and national regulations.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No.

14.6. Special precautions for user

no data available



Safety Data Sheet

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

21071-69 NitriVer 3 Nitrite Reagent

Product code: 2107169 Revision date: 18.11.2021 Page 8 of 8

Creation date: 09.02.2005

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 18.11.2021

Safety datasheet sections which have been updated: 11

Revision: 22.09.2021

Safety datasheet sections which have been updated: 2, 3, 16

Revision: 15.02.2021

Safety datasheet sections which have been updated: 7

Revision: 07.03.2019

Safety datasheet sections which have been updated: 2, 4, 11, 15

Revision: 22.005.2018

Safety datasheet sections which have been updated: 2, 7, 13, 16

Revision: 22.01.2018

Safety datasheet sections which have been updated: 3, 11

Revision: 5.03.2015

Safety datasheet sections which have been updated: 2, 11

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

| Classification | Classification procedure |
|--------------------|--------------------------|
| Eye Dam. 1; H318 | Calculation method |
| Skin Sens. 1; H317 | Calculation method |

Relevant H and EUH statements (number and full text)

| H314 | Causes severe skin burns and eye damage. |
|-------|--|
| H315 | Causes skin irritation. |
| 11047 | 8.4 |

May cause an allergic skin reaction. H317 H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)





according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 1 of 10

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

1.1. Product identifier

21072-49 NitraVer 6 Nitrate Reagent

UFI: GQY5-1FVA-M00F-GWR0

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

5. Pacific Way

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Germ cell mutagenicity: Muta. 2 Carcinogenicity: Carc. 1B Reproductive toxicity: Repr. 2

Specific target organ toxicity - repeated exposure: STOT RE 1 Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements: Harmful if inhaled. Causes skin irritation.

Causes serious eye damage.

Suspected of causing genetic defects.

May cause cancer.

Suspected of damaging fertility. Suspected of damaging the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements





according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 2 of 10

Regulation (EC) No. 1272/2008

Hazard components for labelling

Potassium disulfate cadmium (non-pyrophoric)

Signal word: Danger

Pictograms:









Hazard statements

H332 Harmful if inhaled. H315 Causes skin irritation.

H318 Causes serious eye damage.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.

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

protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P310 Immediately call a POISON CENTER/doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

or shower.

Additional advice on labelling

Classification according to EU Directives 67/548/EEC or 1999/45/EC

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 3 of 10

Hazardous components

| CAS No | Chemical name | | | | | |
|------------|---|--------------|------------------|----------|--|--|
| | EC No | Index No | REACH No | | | |
| | GHS Classification | | | | | |
| 7757-82-6 | Sodium sulfate | | 40-50 % | | | |
| | 231-820-9 | | | | | |
| | | | | | | |
| 36679-96-6 | CDTA Trisodium Salt | | | 20-30 % | | |
| | | | | | | |
| | Skin Irrit. 2, Eye Irrit. 2; H315 H319 | | | | | |
| 7778-77-0 | Potassium dihydrogen phosphate | | | 10-20- % | | |
| | 231-913-4 | | 01-2119490224-41 | | | |
| 7790-62-7 | Potassium disulfate | | 5-10 % | | | |
| | 232-216-8 | | 01-2119987095-26 | | | |
| | Skin Corr. 1A, Eye Dam. 1; H314 H | | | | | |
| 7487-88-9 | Magnesium sulfate | | 1-10 % | | | |
| | 231-298-2 | | | | | |
| 7440-43-9 | cadmium (non-pyrophoric) | | | 1-10 % | | |
| | 231-152-8 | 048-002-00-0 | | | | |
| | Carc. 1B, Muta. 2, Repr. 2, Acute Tox. 2, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H350 H341 H361fd H330 H372 H400 H410 | | | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.

Consult a physician. Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air.

Consult a physician. Show this safety data sheet to the doctor in attendance.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

After ingestion

Consult a physician. Show this safety data sheet to the doctor in attendance. Induce vomiting, but only if victim is fully conscious.

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

Components of the product may affect the nervous system.

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

Treat symptomatically.



Safety Data Sheet

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 4 of 10

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

None known.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

The following may develop in event of fire: sulfur oxides., nitrogen oxides (NOx), 2570 - Cadmium compound

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional 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

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. Do not breathe vapours/dust. Avoid contact with skin and eyes. General industrial hygiene practice.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep at temperatures between 10 and 25 °C. Keep in a dry, cool and well-ventilated place.

Hints on joint storage

Incompatible with strong acids and oxidizing agents.

Further information on storage conditions

Accessible only for authorized persons.

7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



Safety Data Sheet

according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 5 of 10

DNEL/DMEL values

| CAS No | Substance | | | |
|-----------|--------------------------|----------------|--------|-------|
| DNEL type | | Exposure route | Effect | Value |
| 7440-43-9 | cadmium (non-pyrophoric) | | | |
| , | | | | |

Additional advice on limit values

None known

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

Eye/face protection

Safety glasses with side-shields.

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

Skin protection

Remove and wash contaminated clothing before re-use.

Avoid contact with skin, eyes and clothing.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: powder Colour: blue Odour: odourless

pH-Value (at 20 °C): 4,2 (5 % solution)

Changes in the physical state

Melting point:> 200 °CInitial boiling point and boiling range:not applicableSublimation point:no data availableSoftening point:not applicablePour point:no data availableFlash point:not applicable

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

not applicable



Safety Data Sheet

according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 6 of 10

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

Auto-ignition temperature

Solid: no data available
Gas: no data available
Decomposition temperature: > 200 °C

Oxidizing properties

no data available

Vapour pressure:

Vapour pressure:

Density (at 20 °C):

Bulk density:

No data available

Water solubility:

(at 20 °C)

completely soluble

Solubility in other solvents

no data available

Partition coefficient: not applicable Viscosity / dynamic: not applicable Viscosity / kinematic: not applicable Flow time: not applicable Vapour density: not applicable Evaporation rate: not applicable Solvent separation test: not applicable Solvent content: not applicable

9.2. Other information

Solid content: no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Minimize dust generation and accumulation.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

To avoid thermal decomposition, do not overheat.

10.4. Conditions to avoid

Exposure to moisture.

10.5. Incompatible materials

Oxidizing agents, Metals, Hydrazoic acid

10.6. Hazardous decomposition products

Decomposition starting from 200 °C.

Decomposition products: Sulphur oxides, Oxides of phosphorus,

SECTION 11: Toxicological information

11.1. Information on toxicological effects



according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 7 of 10

Toxicocinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (inhalation vapour) 14,49 mg/l; ATE (inhalation aerosol) 1,449 mg/l

| CAS No | Chemical name | | | | | |
|-----------|--------------------------------|---------------|-----------|---------|--------|--------|
| | Exposure route | Dose | | Species | Source | Method |
| 7757-82-6 | Sodium sulfate | | | | | |
| | oral | LD50 mg/kg | 5989 | mouse | | |
| 7778-77-0 | Potassium dihydrogen phosphate | | | | | |
| | oral | LD50 mg/kg | >2000 | rat | | |
| | dermal | LD50 mg/kg | 4640 | rabbit | | |
| 7440-43-9 | cadmium (non-pyrophoric) | | | | | |
| | inhalation vapour | ATE | 0,5 mg/l | | | |
| | inhalation aerosol | ATE | 0,05 mg/l | | | |

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

H318 - Causes serious eye damage.

Skin corrosion: Not applicable.

Test Method: Animal studies, rabbit skin

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (cadmium (non-pyrophoric))

May cause cancer. (cadmium (non-pyrophoric))

Suspected of damaging fertility. Suspected of damaging the unborn child. (cadmium (non-pyrophoric))

STOT-single exposure

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

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

Specific effects in experiment on an animal

No toxicology information is available.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

May cause long-term adverse effects in the aquatic environment.

Do not flush into surface water or sanitary sewer system.





Safety Data Sheet

according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 8 of 10

| CAS No | Chemical name | | | | | | |
|-----------|--------------------------|--------------|----------|-----------|------------------|--------|--------|
| | Aquatic toxicity | Dose | | [h] [d] | Species | Source | Method |
| 7757-82-6 | Sodium sulfate | | | | | | |
| | Acute fish toxicity | LC50 | 120 mg/l | 96 h | Gambusia affinis | Merck | |
| | Acute crustacea toxicity | EC50 mg/l | 2564 | 48 h | | | |

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

In accordance with local and national regulations.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not classified as dangerous in the meaning of transport regulations.

Special Provisions:375

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not classified as dangerous in the meaning of transport regulations.

Special Provisions:375

Air transport (ICAO-TI/IATA-DGR)



Safety Data Sheet

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 9 of 10

Other applicable information (air transport)

Not classified as dangerous in the meaning of transport regulations.

Special Provisions:197

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

Other applicable information

Not relevant

SECTION 15: Regulatory information

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

EU regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

cadmium (non-pyrophoric)

Restrictions on use (REACH, annex XVII):

Entry 23

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of

child-bearing age.

Water hazard class (D): 3 - strongly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 22.09.2021

Safety datasheet sections which have been updated: 2, 3, 7, 11

Revision: 26.10.2020

Safety datasheet sections which have been updated: 2, 11, 15, 16

Revision: 11.03.2015

Safety datasheet sections which have been updated: 2, 11, 14

Revision: 23.01.2015

Safety datasheet sections which have been updated: 14



according to Regulation (EC) No 1907/2006

21072-49 NitraVer 6 Nitrate Reagent

Revision date: 22.09.2021 Product code: 2107249 Page 10 of 10

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

| Classification | Classification procedure |
|-------------------------|--------------------------|
| Acute Tox. 4; H332 | Calculation method |
| Skin Irrit. 2; H315 | Calculation method |
| Eye Dam. 1; H318 | Calculation method |
| Muta. 2; H341 | Calculation method |
| Carc. 1B; H350 | Calculation method |
| Repr. 2; H361fd | Calculation method |
| STOT RE 1; H372 | Calculation method |
| Aquatic Chronic 1; H410 | Calculation method |

Relevant H and EUH statements (number and full text)

| H314 | Causes severe skin burns and eye damage. |
|--------|--|
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H332 | Harmful if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)