

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 1 of 9

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

1.1. Product identifier

Reagent 130+R0521

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

Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|----------------------------------|------------------------------|
| Company name: | AnalytiChem GmbH | |
| Street: | Stempelstraße 6 | |
| Place: | D-47167 Duisburg | |
| Telephone: | 0203/5194-0 | Telefax: 0203/5194-290 |
| e-mail: | info@analytichem.de | |
| Contact person: | Abteilung Produktsicherheit | Telephone: 0203/5194-107/117 |
| e-mail: | produktsicherheit@analytichem.de | |
| Internet: | www.analytichem.de | |
| Responsible Department: | Abteilung Produktsicherheit | |

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Further Information

This product is a mixture. REACH Registration Number see section 3.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 2 of 9

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|--|--------------|------------------|--------------|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 7732-18-5 | water | | | 95 - < 100 % |
| | 231-791-2 | | | |
| 7681-49-4 | sodium fluoride | | | < 0.1 % |
| | 231-667-8 | 009-004-00-7 | 01-2119539420-47 | |
| | Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2; H301 H315 H319 EUH032 | | | |

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

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|-----------|---|-----------------|----------|
| | Specific Conc. Limits, M-factors and ATE | | |
| 7681-49-4 | 231-667-8 | sodium fluoride | < 0.1 % |
| | dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 25 - < 2000 mg/kg | | |

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures**General information**

No data available

After inhalation

Provide fresh air.

After contact with skin

Wash immediately with: Water

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.

Call a doctor if you feel unwell.

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

No data available

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-flammable.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 3 of 9

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

No data available

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Wipe up with absorbent material (eg. cloth, fleece).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle and open container with care.

Keep container tightly closed.

Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Wash contaminated clothing prior to re-use.

Do not breathe vapour/aerosol.

Avoid contact with skin, eyes and clothes.

Further information on handling

Wash contaminated clothing before reuse.

Wash hands before breaks and after work.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 4 of 9

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

Store in a dry place.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

| CAS No | Substance | Exposure route | Effect | Value |
|------------------------|-----------------|----------------|----------|-----------------------|
| 7681-49-4 | sodium fluoride | | | |
| Worker DNEL, acute | | inhalation | systemic | 2,5 mg/m ³ |
| Worker DNEL, long-term | | inhalation | local | 2,5 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 0,36 mg/kg bw/day |
| Worker DNEL, acute | | dermal | systemic | 0,36 mg/kg bw/day |

PNEC values

| CAS No | Substance | Value |
|--|-----------------|----------|
| 7681-49-4 | sodium fluoride | |
| Freshwater | | 0,9 mg/l |
| Micro-organisms in sewage treatment plants (STP) | | 51 mg/l |
| Soil | | 11 mg/kg |

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 5 of 9

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|---|-------------------|---------------------------|
| Physical state: | Liquid | |
| Colour: | colourless | |
| Odour: | odourless | |
| Odour threshold: | No data available | |
| Melting point/freezing point: | | not determined |
| Boiling point or initial boiling point and boiling range: | | 100 °C |
| Flammability: | | No data available |
| Lower explosion limits: | | not determined |
| Upper explosion limits: | | not determined |
| Flash point: | | X |
| Auto-ignition temperature: | | No data available |
| Decomposition temperature: | | not determined |
| pH-Value: | | not determined |
| Viscosity / kinematic: | | No data available |
| Solubility in other solvents | | not determined |
| Dissolution rate: | | No data available |
| Partition coefficient n-octanol/water: | | not determined |
| Dispersion stability: | | No data available |
| Vapour pressure: | | No data available |
| Vapour pressure: | | No data available |
| Density: | | 1,00000 g/cm ³ |
| Relative density: | | No data available |
| Bulk density: | | No data available |
| Relative vapour density: | | not determined |
| Particle characteristics: | | No data available |

9.2. Other information

Information with regard to physical hazard classes

| | |
|---------------------------|-------------------|
| Explosive properties | |
| No data available | |
| Sustaining combustion: | No data available |
| Self-ignition temperature | |
| Solid: | not applicable |
| Gas: | not applicable |
| Oxidizing properties | |
| Not oxidising. | |

Other safety characteristics

| | |
|--------------------------|-------------------|
| Evaporation rate: | not determined |
| Solvent separation test: | No data available |
| Solvent content: | 0 |
| Solid content: | not determined |
| Sublimation point: | No data available |
| Softening point: | No data available |
| Pour point: | No data available |

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 6 of 9

No data available:

Viscosity / dynamic:

No data available

Flow time:

No data available

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Further information

No data available

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.

| CAS No | Chemical name | | | | |
|-----------|-----------------|--------------------------|---------|----------------------------|--------------------|
| | Exposure route | Dose | Species | Source | Method |
| 7681-49-4 | sodium fluoride | | | | |
| | oral | LD50 > 25 - < 2000 mg/kg | Rat | Other company data (1994) | OECD Guideline 401 |
| | dermal | LD50 > 2000 mg/kg | Rat | REACH Registration Dossier | EPA OPPTS 870.1200 |

Irritation and corrosivity

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 7 of 9

Information on likely routes of exposure

No data available

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience

No data available

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information

No data available

Further information

No data available

SECTION 12: Ecological information

12.1. Toxicity

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

| CAS No | Chemical name | | | | | |
|-----------|----------------------|---------------|-----------|-----------------------|---|--|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 7681-49-4 | sodium fluoride | | | | | |
| | Acute algae toxicity | ErC50 43 mg/l | 96 h | various algae species | European Union Risk Assessment Report, V | Methods not detailed in the review. |
| | Fish toxicity | NOEC 4 mg/l | 21 d | Oncorhynchus mykiss | EU RAR Hydrogen Fluoride, Volume 8, 2001 | other: no guideline stated |
| | Algae toxicity | NOEC 50 mg/l | 7 d | various | Appendix to Report 785484010, RIVM (1989) | The review includes summaries of a numbr |
| | Crustacea toxicity | NOEC 3,7 mg/l | 21 d | Daphnia magna | European Union Risk Assessment Report, V | The publication is a review article of v |

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

BCF

| CAS No | Chemical name | BCF | Species | Source |
|-----------|-----------------|---------|---------|----------------------|
| 7681-49-4 | sodium fluoride | 53 - 58 | | EU RAR Hydrogen Fluo |

12.4. Mobility in soil

No data 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. Endocrine disrupting properties

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 8 of 9

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|--|
| <u>14.1. UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.2. UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.3. Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>14.4. Packing group:</u> | No dangerous good in sense of this transport regulation. |

Inland waterways transport (ADN)

| | |
|--|--|
| <u>14.1. UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.2. UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.3. Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>14.4. Packing group:</u> | No dangerous good in sense of this transport regulation. |

Marine transport (IMDG)

| | |
|--|--|
| <u>14.1. UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.2. UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.3. Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>14.4. Packing group:</u> | No dangerous good in sense of this transport regulation. |

Air transport (ICAO-TI/IATA-DGR)

| | |
|--|--|
| <u>14.1. UN number or ID number:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.2. UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| <u>14.3. Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| <u>14.4. Packing group:</u> | No dangerous good in sense of this transport regulation. |

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R0521

Revision date: 20.02.2023

Product code: 130+R0521

Page 9 of 9

National regulatory information

Water hazard class (D): -- non-hazardous to water

Additional information

No data available

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport 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 Harmonized 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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

| | |
|--------|--|
| H301 | Toxic if swallowed. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| EUH032 | Contact with acids liberates very toxic gas. |

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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