

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Säuregemisch Salpetersäure / Flusssäure 100 ml/l HNO₃ 65 % + 20 ml/l HF 47 % in Wasser

Revision date: 27.08.2024

Product code: 34201

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

1.1. Product identifier

Säuregemisch Salpetersäure / Flusssäure 100 ml/l HNO₃ 65 % + 20 ml/l HF 47 % in Wasser

UFI: KAQ1-J351-N00H-DMAQ

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
ACD
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

Met. Corr. 1; H290
Acute Tox. 3; H311
Acute Tox. 4; H302
Acute Tox. 4; H332
Skin Corr. 1B; H314
Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

nitric acid ~9 %
hydrofluoric acid ~1 %

Signal word: Danger

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Pictograms:



Hazard statements

| | |
|-----------|--|
| H290 | May be corrosive to metals. |
| H302+H332 | Harmful if swallowed or if inhaled. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |

Precautionary statements

| | |
|----------------|--|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing and eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor. |

Special labelling of certain mixtures

| | |
|--------|-------------------------------------|
| EUH071 | Corrosive to the respiratory tract. |
|--------|-------------------------------------|

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Relevant ingredients

| CAS No | Chemical name | Quantity |
|-----------|---|------------------|
| | EC No | Index No |
| | | REACH No |
| | Classification (Regulation (EC) No 1272/2008) | |
| 7697-37-2 | nitric acid | 5 - < 10 % |
| | 231-714-2 | 007-030-00-3 |
| | | 01-2119487297-23 |
| | Ox. Liq. 3, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A; H272 H290 H331 H314 EUH071 | |
| 7664-39-3 | Hydrofluoric acid ... % | 1 - < 5 % |
| | 231-634-8 | 009-003-00-1 |
| | | 01-2119458860-33 |
| | Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, Skin Corr. 1A; H310 H330 H300 H314 | |

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 | |
| 7697-37-2 | 231-714-2 | nitric acid | 5 - < 10 % |
| | | inhalation: ATE 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 - 100 Skin Corr. 1B; H314: >= 5 - < 20 | |
| 7664-39-3 | 231-634-8 | Hydrofluoric acid ... % | 1 - < 5 % |
| | | inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); inhalation: LC50 = 2240 ppm (gases); dermal: ATE = 5 mg/kg; oral: ATE = 5 mg/kg Skin Corr. 1A; H314: >= 7 - 100 Skin Corr. 1B; H314: >= 1 - < 7 Eye Irrit. 2; H319: >= 0,1 - < 1 | |

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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

fast help required

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

Call a physician immediately.

After inhalation

Provide fresh air.

If breathing is irregular or stopped, administer artificial respiration.

Call a physician immediately.

After contact with skin

Remove contaminated, saturated clothing immediately.

Wash immediately with:

Ca-Gluconate solution

Water

Call a physician immediately.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth immediately and drink plenty of water.

Adverse human health effects and symptoms: Gastric perforation.

Call a physician immediately.

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

Irritant — skin irritation and eye damage

Causes burns.

Cough

Dyspnoea

Risk of serious damage to eyes.

Vomiting

Methaemoglobinaemia

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-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Nitrogen oxides (NO_x)

Hydrogen fluoride

5.3. Advice for firefighters

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Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

Additional information

Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

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

Corrosive to metals.

Do not breathe vapour/aerosol.

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

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.

Clean contaminated articles and floor according to the environmental legislation.

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

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

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

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Provide adequate ventilation. Do not breathe vapour/aerosol.
Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Make available sufficient washing facilities
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.
Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Further information on handling

Draw up and observe skin protection programme.
Wash hands and face before breaks and after work and take a shower if necessary.
Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations.

Further information on storage conditions

Store in a dry place.
Unsuitable container/equipment material: Metal, Glass

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

| CAS No | Substance | ppm | mg/m ³ | fib/cm ³ | Category | Origin |
|-----------|--------------------------|-----|-------------------|---------------------|---------------|--------|
| 7664-39-3 | Hydrogen fluoride (as F) | 1.8 | 1.5 | | TWA (8 h) | |
| | | 3 | 2.5 | | STEL (15 min) | |
| 7697-37-2 | Nitric acid | 1 | 2.6 | | STEL (15 min) | |

Biological limit values

| CAS No | Substance | Parameter | Value | Test material | Sampling time |
|-----------|-------------------|-----------|--------|---------------|---------------|
| 7664-39-3 | Hydrogen fluoride | Fluoride | 3 mg/L | Urine | End of shift |

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DNEL/DMEL values

| CAS No | Substance | | |
|--------------------------|-------------------------|----------|------------------------|
| DNEL type | Exposure route | Effect | Value |
| 7664-39-3 | Hydrofluoric acid ... % | | |
| Worker DNEL, long-term | inhalation | systemic | 1,5 mg/m ³ |
| Worker DNEL, acute | inhalation | systemic | 2,5 mg/m ³ |
| Worker DNEL, long-term | inhalation | local | 1,5 mg/m ³ |
| Worker DNEL, acute | inhalation | local | 2,5 mg/m ³ |
| Consumer DNEL, long-term | inhalation | systemic | 0,03 mg/m ³ |
| Consumer DNEL, acute | inhalation | systemic | 0,03 mg/m ³ |
| Consumer DNEL, long-term | inhalation | local | 0,2 mg/m ³ |
| Consumer DNEL, acute | inhalation | local | 1,25 mg/m ³ |
| Consumer DNEL, long-term | oral | systemic | 0,01 mg/kg bw/day |
| Consumer DNEL, acute | oral | systemic | 0,01 mg/kg bw/day |

PNEC values

| CAS No | Substance | |
|--|-------------------------|--|
| Environmental compartment | Value | |
| 7664-39-3 | Hydrofluoric acid ... % | |
| Freshwater | 0,89 mg/l | |
| Marine water | 0,089 mg/l | |
| Freshwater sediment | 3,38 mg/kg | |
| Marine sediment | 0,338 mg/kg | |
| Micro-organisms in sewage treatment plants (STP) | 51 mg/l | |
| Soil | 10,6 mg/kg | |

8.2. Exposure controls

Appropriate engineering controls

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection:
Face protection shield
goggles.

Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Recommended glove articles: KCL 741 Dermatrill® L
Recommended material: NBR (Nitrile rubber) 0,11 mm
Wearing time with permanent contact: > 480 min

By short-term hand contact

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Recommended glove articles: KCL 741 Dermatril® L
Recommended material: NBR (Nitrile rubber) 0,11mm
Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>, <)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing.
Take off immediately all contaminated clothing.
Wash hands before breaks and after work.
The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation
The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
In case of inadequate ventilation wear respiratory protection.

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: | stinging | |
| Odour threshold: | No data available | |
| Melting point/freezing point: | | No data available |
| Boiling point or initial boiling point and boiling range: | | No data available |
| Flammability: | | not applicable |
| Lower explosion limits: | | not determined |
| Upper explosion limits: | | not determined |
| Flash point: | | X |
| Auto-ignition temperature: | | No data available |
| Decomposition temperature: | | not determined |
| Viscosity / kinematic: | | No data available |
| Solubility in other solvents | | |
| No data available | | |
| Dissolution rate: | | No data available |
| Partition coefficient n-octanol/water: | | No data available |
| Dispersion stability: | | No data available |
| Vapour pressure: | | No data available |
| Vapour pressure: | | No data available |
| Density: | | No data available |
| Relative density: | | No data available |
| Bulk density: | | No data available |
| Relative vapour density: | | No data available |

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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

The product is: oxidising, Oxidising.

Other safety characteristics

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

0

Solid content:

0

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

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

Corrosive to metals.

Oxidising agent

10.2. Chemical stability

No data available

10.4. Conditions to avoid

Radiant heat.

10.5. Incompatible materials

Metal

Glass

The product develops hydrogen in an aqueous solution in contact with metals.

10.6. Hazardous decomposition products

In case of fire may be liberated:

SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Acute toxicity

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Toxic in contact with skin.
Harmful if swallowed.
Harmful if inhaled.
Obtain special instructions before use.

| CAS No | Chemical name | | | | |
|-----------|-------------------------|---------------|---------|---------------------|--------------------|
| | Exposure route | Dose | Species | Source | Method |
| 7697-37-2 | nitric acid | | | | |
| | inhalation vapour | ATE 2,65 mg/l | | | |
| 7664-39-3 | Hydrofluoric acid ... % | | | | |
| | oral | ATE 5 mg/kg | | | |
| | dermal | ATE 5 mg/kg | | | |
| | inhalation vapour | ATE 0,5 mg/l | | | |
| | inhalation dust/mist | ATE 0,05 mg/l | | | |
| | inhalation (1 h) gas | LC50 2240 ppm | Rat | Study report (1990) | OECD Guideline 403 |

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.
Serious eye damage/eye irritation: Causes serious eye damage.
Corrosive to the respiratory tract.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects 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.

Information on likely routes of exposure

There are no data available on the preparation/mixture itself.

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

Additional information on tests

There are no data available on the preparation/mixture itself.

Practical experience

There are no data available on the preparation/mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

Other information

Adverse human health effects and symptoms
gastric perforation
Pulmonary oedema
see also Section 4

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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 |
| 7697-37-2 | nitric acid | | | | | |
| | Acute fish toxicity | LC50 mg/l | 1559 | 96 h | Topeka shiner | Environmental Toxicology and Chemistry, other: ASTM E729-26 |
| | Fish toxicity | NOEC | 268 mg/l | 30 d | juvenile Topeka shiner and with juvenile Fathead m | Study report (2009) Growth tests estimated the test chemical |
| | Algae toxicity | NOEC mg/l | > 419 | 10 d | several benthic diatoms; see results | Marine Biology 43:307-315 (1977) Ten cultures of benthic diatoms were iso |
| | Acute bacteria toxicity | EC50 mg/l () | > 1000 | 3 h | Activated sludge | Study report (2008) OECD Guideline 209 |
| 7664-39-3 | Hydrofluoric acid ... % | | | | | |
| | Acute fish toxicity | LC50 | 299 mg/l | 96 h | Salmo trutta | REACH Registration Dossier other: U.S Environmental Protection Agen |
| | Acute algae toxicity | ErC50 | 43 mg/l | 96 h | various algae species | REACH Registration Dossier Methods not detailed in the review. |
| | Crustacea toxicity | NOEC | 3,7 mg/l | 21 d | Daphnia magna | REACH Registration Dossier The publication is a review article of v |
| | Acute bacteria toxicity | EC50 mg/l () | 2930 | 3 h | Activated sludge | REACH Registration Dossier ISO 8192 |

12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

BCF

| CAS No | Chemical name | BCF | Species | Source |
|-----------|-------------------------|---------|---------------|----------------------|
| 7664-39-3 | Hydrofluoric acid ... % | 53 - 58 | not specified | REACH Registration D |

12.4. Mobility in soil

There are no data available on the mixture itself.

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

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

Discharge into the environment must be avoided.

Further information

Avoid release to the environment.

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SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

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

Send to a physico-chemical treatment facility under observation of official regulations.

Do not empty into drains.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

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)**

| | |
|--|--|
| 14.1. UN number or ID number: | UN 2922 |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, TOXIC, N.O.S. (nitric acid, Hydrofluoric acid) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | II |
| Hazard label: | 8+6.1 |
| Classification code: | CT1 |
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |
| Transport category: | 2 |
| Hazard No: | 86 |
| Tunnel restriction code: | E |

Inland waterways transport (ADN)

| | |
|--|--|
| 14.1. UN number or ID number: | UN 2922 |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, TOXIC, N.O.S. (nitric acid, Hydrofluoric acid) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | II |
| Hazard label: | 8+6.1 |
| Classification code: | CT1 |
| Special Provisions: | 274 802 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |

Marine transport (IMDG)

| | |
|--|--|
| 14.1. UN number or ID number: | UN 2922 |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, TOXIC, N.O.S. (Nitric acid, Hydrofluoric acid) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | II |
| Hazard label: | 8+6.1 |
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |
| EmS: | F-A, S-B |

Air transport (ICAO-TI/IATA-DGR)

| | |
|--|--|
| 14.1. UN number or ID number: | UN 2922 |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, TOXIC, N.O.S. (Nitric acid, Hydrofluoric acid) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | II |

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| | | |
|--|---------|------|
| Hazard label: | 8+6.1 | |
| Special Provisions: | A3 A803 | |
| Limited quantity Passenger: | 0.5 L | |
| Passenger LQ: | Y840 | |
| Excepted quantity: | E2 | |
| IATA-packing instructions - Passenger: | | 851 |
| IATA-max. quantity - Passenger: | | 1 L |
| IATA-packing instructions - Cargo: | | 855 |
| IATA-max. quantity - Cargo: | | 30 L |

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Oxidising substances. strongly corrosive.

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 3, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

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.

Water hazard class (D): 1 - slightly hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,9,11,12.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Säuregemisch Salpetersäure / Flusssäure 100 ml/l HNO₃ 65 % + 20 ml/l HF 47 % in Wasser

Revision date: 27.08.2024

Product code: 34201

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Abbreviations and acronyms

Ox. Liq: Oxidising liquid
 Met. Corr: Substance or mixture corrosive to metals
 Acute Tox: Acute toxicity
 Skin Corr: Skin corrosion
 Eye Dam: Eye damage
 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%

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

| Classification | Classification procedure |
|---------------------|--------------------------|
| Met. Corr. 1; H290 | On basis of test data |
| Acute Tox. 3; H311 | Calculation method |
| Acute Tox. 4; H302 | Calculation method |
| Acute Tox. 4; H332 | Calculation method |
| Skin Corr. 1B; H314 | Calculation method |
| Eye Dam. 1; H318 | Calculation method |

Relevant H and EUH statements (number and full text)

H272 May intensify fire; oxidiser.
 H290 May be corrosive to metals.
 H300 Fatal if swallowed.
 H302 Harmful if swallowed.
 H302+H332 Harmful if swallowed or if inhaled.
 H310 Fatal in contact with skin.
 H311 Toxic in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H330 Fatal if inhaled.
 H331 Toxic if inhaled.
 H332 Harmful if inhaled.
 EUH071 Corrosive to the respiratory tract.

Further Information

Provide appropriate information, instructions and training to users
 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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)