

Safety Data Sheet

according to UK REACH Regulation

"Multielement standard solution ""Varian Tuning Solution"" 15 elements in nitric acid 5% 1 Liter co

Revision date: 14.08.2023 Product code: 27704 Page 1 of 14

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

1.1. Product identifier

"Multielement standard solution ""Varian Tuning Solution"" 15 elements in nitric acid 5% 1 Liter co

UFI: DHQF-52RV-Q008-QPCJ

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

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 telephoneFor Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,number: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

Telefax: 0203/5194-290

accepted)

Further Information

inapplicable, this product is a mixture REACH registration number see section 3

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

nitric acid nickel dinitrate

Signal word: Danger

Pictograms:







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Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

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

Hazardous components

| CAS No | Chemical name | Chemical name | | | | |
|------------|--|---------------|------------------|--|--|--|
| | EC No | Index No | REACH No | | | |
| | Classification (GB CLP Regulation) | | | | | |
| 7697-37-2 | nitric acid | | | | | |
| | 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 | | | | | |
| 13138-45-9 | nickel dinitrate | | | | | |
| | 236-068-5 | 028-012-00-1 | | | | |
| | Ox. Sol. 2, Carc. 1A, Muta. 2, Repr. 1B, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H272 H350i H341 H360D H332 H302 H315 H318 H334 H317 H372 H400 H410 | | | | | |

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. L | Limits, M-factors and ATE | |
| 7697-37-2 | 231-714-2 | nitric acid | 5 - < 10 % |
| | | 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 rr. 1B; H314: >= 5 - < 20 | |
| 13138-45-9 | 236-068-5 | nickel dinitrate | < 0.01 % |
| | 361,9 mg/kg S | · | |



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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

First aider: Pay attention to self-protection!

After inhalation

Provide fresh air.

If breathing is irregular or stopped, administer artificial respiration.

Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

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. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

Allergic reactions

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-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Nitrogen oxides (NOx)

5.3. Advice for firefighters

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



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Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

Additional information

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.

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.

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).

Provide adequate ventilation.

Avoid contact with skin, eyes and clothes.



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Advice on protection against fire and explosion

Material, oxygen-rich, Oxidising

Advice on general occupational hygiene

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

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.

Provide adequate ventilation as well as local exhaustion at critical locations.

Keep in a cool place.

Hints on joint storage

national regulations

Further information on storage conditions

Unsuitable container/equipment material: Metal, Light metal

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|-----------|-------------|-----|-------|-----------|---------------|--------|
| 7697-37-2 | Nitric acid | 1 | 2.6 | | STEL (15 min) | WEL |

DNEL/DMEL values

| CAS No | Substance | | | | | |
|--------------------------|------------------|----------------|----------|-----------------------|--|--|
| DNEL type | | Exposure route | Effect | Value | | |
| 13138-45-9 | nickel dinitrate | | | | | |
| Consumer DNEL, acute | | oral | systemic | 0,012 mg/kg bw/day | | |
| Consumer DNEL, long-term | | oral | systemic | 0,02 mg/kg bw/day | | |
| Worker DNEL, acute | | inhalation | systemic | 104 mg/m³ | | |
| Worker DNEL, acute | | inhalation | local | 1,6 mg/m³ | | |
| Consumer DNEL, acute | | inhalation | systemic | 8,8 mg/m³ | | |
| Consumer DNEL, acute | | inhalation | local | 0,1 mg/m³ | | |



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PNEC values

| CAS No | Substance | | | |
|--|-----------------------|-------------|--|--|
| Environmenta | al compartment | Value | | |
| 13138-45-9 | nickel dinitrate | | | |
| Freshwater | | 0,0071 mg/l | | |
| Freshwater (in | ntermittent releases) | 0 mg/l | | |
| Marine water | | 0,0086 mg/l | | |
| Freshwater se | ediment | 109 mg/kg | | |
| Marine sedim | ent | 109 mg/kg | | |
| Secondary po | pisoning | 0,12 mg/kg | | |
| Micro-organisms in sewage treatment plants (STP) | | 0,33 mg/l | | |
| Soil | | 29,9 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

Face protection shield goggles.

Hand protection

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: vertrieb@kcl.de with the following specification (test according to EN 374):

By long-term hand contact

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

By short-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm 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.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

Do not allow to enter into surface water or drains.



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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:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

Flammability: No data available Lower explosion limits: No data available Upper explosion limits: No data available Flash point: No data available Auto-ignition temperature: No data available Decomposition temperature: pH-Value: acidic Viscosity / kinematic: No data available Water solubility: No data available

Solubility in other solvents

not determined

No data available Dissolution rate: Partition coefficient n-octanol/water: No data available No data available Dispersion stability: Vapour pressure: No data available Vapour pressure: No data available Density: 1,027 g/cm³ Relative density: No data available No data available Bulk density: Relative vapour density: No data available 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: No data available
Gas: No data available

Oxidizing properties

Oxidising.

Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available
Solvent content:

No data available
Solid content:

No data available
Sublimation point:

No data available
Softening point:

No data available
Pour point:

No data available

No data available:

Viscosity / dynamic: No data available



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Flow time: No data available

Further Information

Corrosive to metals.

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals.

Oxidising agent, strong

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Danger of explosion:

Acetone, Alcohol, Aniline, Substance, organic, Benzene, Aniline, Amines, Hydrocarbons, halogenated, Diethyl ether, Hydrazine, Dioxane, Acetic acid, Acetic anhydride, Ethanol, Fluorine, Formaldehyde, Rubber articles, Hydrocarbons, Copper, Powdered metals, Methanol, Phosphorus trichloride, Hydrogen phosphides, Gasoline, Reducing agent, titanium, Toluene, Hydrogen peroxide, tin, Xylene, Dichloromethane, carbon black, Potassium chlorate, permanganates, e.g. potassium permanganate

Ignition hazard:

Amines, Ammonia (NH3), Combustible substance, aldehydes, Hydrogen iodide (HI), White/yellow phosphor, Hydrogen sulphide (H2S), Alkali metals, Alkaline earth metal

Violent reaction with:

Nitriles, antimony, arsenic, boron, Alkali (lye), sodium hypochlorite, Formic acid, sulphuric acid, sulphuric acid, sulphuric acid, selenium

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Cellulose, Metal

Keep away from: Metal.

Keep away from combustible material.

The product develops hydrogen in an aqueous solution in contact with metals. / Nitrogen oxides (NOx)

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 GB CLP Regulation

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Pulmonary oedema

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l



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| CAS No | Chemical name | | | | | | |
|------------|----------------------|---------------|----------|---------|--|--------------------|--|
| | Exposure route | Dose | | Species | Source | Method | |
| 7697-37-2 | nitric acid | nitric acid | | | | | |
| | inhalation vapour | ATE 2,6 | 5 mg/l | | | | |
| 13138-45-9 | nickel dinitrate | | | | | | |
| | oral | LD50 mg/kg | 361,9 | Rat | Regul Toxicol and Pharmacol (doi.org/10. | OECD Guideline 425 | |
| | inhalation vapour | ATE | 11 mg/l | | | | |
| | inhalation dust/mist | ATE | 1,5 mg/l | | | | |

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Risk of serious damage to eyes.

Sensitising effects

May cause an allergic skin reaction. (nickel dinitrate)

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.

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Other information

There are no data available on the mixture itself.

Further information

Irritant — skin irritation and eye damage

Causes burns.

Cough

Dyspnoea

Risk of serious damage to eyes.

Vomiting

Methaemoglobinaemia

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.



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| 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 | |
| 13138-45-9 | nickel dinitrate | | | | | | | |
| | Acute fish toxicity | LC50 mg/l | 15,3 | 96 h | Oncorhynchus mykiss | Aquatic Toxicology 63 (2003) 65-82 (2003 | other: not reported | |
| | Acute algae toxicity | ErC50 mg/l | 0,237 | 72 h | Ankistrodesmus falcatus | Publication (2009) | OECD Guideline 201 | |
| | Acute crustacea toxicity | EC50 mg/l | 0,2663 | 48 h | Ceriodaphnia dubia | Study report (2004) | other: American society of testing and m | |
| | Fish toxicity | NOEC mg/l | 0,057 | 32 d | Pimephales promelas | Water Resources Research Institute. Kent | other: ASTM 1980, E-729 | |
| | Algae toxicity | NOEC | 0,6 mg/l | 14 d | Anabaena cylindrica | Environ. Pollut. (Series A). 25(4):241-2 | other: not reported | |
| | Crustacea toxicity | NOEC mg/l | 0,04 | 42 d | Daphnia magna | Wat. Res. 24(7):845-852 (1990) | Chronic exposure to sublethal concentrat | |
| | Acute bacteria toxicity | (EC50 | 33 mg/l) | 0,5 h | Activated sludge | Journal of Hazardous Materials. B139:332 | 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 |
|------------|------------------|-----|---------------------|----------------------|
| 13138-45-9 | nickel dinitrate | 23 | Spirodela polyrhiza | Ecotoxicology and en |

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 UK REACH.

The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.



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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.

There are no data available on the mixture itself.

12.7. Other adverse effects

Discharge into the environment must be avoided.

Harmful effect due to pH shift.

Forms corrosive mixtures with water even if diluted.

Further information

Do not empty into 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.

.

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

Do not empty into drains.

Do not mix with other wastes.

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 2031 |
|-----------------------------------|-------------|
| 14.2. UN proper shipping name: | NITRIC ACID |
| 14.3. Transport hazard class(es): | 8 |
| 44.4 B. I. | |

14.4. Packing group: Ш Hazard label: 8 Classification code: C1 Limited quantity: 1 I Excepted quantity: F2 Transport category: 2 Hazard No: 80 Tunnel restriction code: F

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 2031
14.2. UN proper shipping name: NITRIC ACID

14.3. Transport hazard class(es):

14.4. Packing group:

Hazard label:

Classification code:

Limited quantity:

Excepted quantity:

Excepted quantity:

Excepted State of the property of the

Marine transport (IMDG)

14.1. UN number or ID number: UN 2031
14.2. UN proper shipping name: NITRIC ACID

14.3. Transport hazard class(es): 8
14.4. Packing group: |



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Hazard label: 8
Special Provisions: 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 203114.2. UN proper shipping name:NITRIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:A212Limited quantity Passenger:ForbiddenPassenger LQ:ForbiddenExcepted quantity:E0

IATA-packing instructions - Passenger: Forbidden
IATA-max. quantity - Passenger: Forbidden
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 28, Entry 75

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

(SEVESO III):

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

This product is regulated 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): 9.



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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%
Ox. Liq: Oxidising liquids
Ox. Sol: Oxidising solids
Met. Corr: Corrosive to metals
Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Skin Irrit: Skin irritation
Eye Dam: Eye damage

Resp. Sens: Respiratory sensitisation

Skin Sens: Skin sensitisation Muta: Germ cell mutagenicity Carc: Carcinogenicity Repr: Reproductive toxicity

STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard

Classification for mixtures and used evaluation method according to GB CLP Regulation

| Classification for mixtures and used evaluation method according to GB CEF Regulation | | | | |
|---|--------------------------|--|--|--|
| Classification | Classification procedure | | | |
| Met. Corr. 1; H290 | On basis of test data | | | |
| Skin Corr. 1B; H314 | Calculation method | | | |
| Eye Dam. 1; H318 | Calculation method | | | |
| Skin Sens. 1; H317 | Calculation method | | | |

Relevant H and EUH statements (number and full text)

| H272 | May intensify fire; oxidiser. |
|--------|--|
| H290 | May be corrosive to metals. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350i | May cause cancer by inhalation. |
| H360D | May damage 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. |
| EUH071 | Corrosive to the respiratory tract. |

Further Information

The above information describes exclusively the safety requirements of the product and is based on our



Safety Data Sheet

according to UK REACH Regulation

"Multielement standard solution ""Varian Tuning Solution"" 15 elements in nitric acid 5% 1 Liter co

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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.)