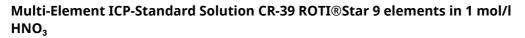
according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



article number: **23TP** Version: **1.0 en** date of compilation: 13.09.2023

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

1.1 Product identifier

Identification of the substance

Article number

Registration number (REACH)

Multi-Element ICP-Standard Solution CR-39 ROTI®Star 9 elements in 1 mol/l HNO₃

23TP

not relevant (mixture)

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin. Do not use for private purposes (household). Food, drink and animal feedingstuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data Department Health, Safety and Environment sheet:

e-mail (competent person):

sicherheit@carlroth.de

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class | Cat- egory | Hazard class and category | Hazard statement |
|---------|--|---------------|---------------------------|---------------------|
| 2.16 | Substance or mixture corrosive to metals | 1 | Met. Corr. 1 | H290 |
| 3.2 | Skin corrosion/irritation | 1B | Skin Corr. 1B | H314 |
| 3.3 | Serious eye damage/eye irritation | 1 | Eye Dam. 1 | H318 |

Supplemental hazard information

| Code | Supplemental hazard information |
|--------|------------------------------------|
| EUH071 | corrosive to the respiratory tract |

For full text of abbreviations: see SECTION 16



according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word Danger

Pictograms

GHS05



Hazard statements

| H290 | May be corrosive to metals |
|------|---|
| H314 | Causes severe skin burns and eye damage |

Precautionary statements

Precautionary statements - prevention

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

Nitric acid ...% [C ≤ 70 %]

Supplemental hazard information

EUH071 Corrosive to the respiratory tract.

Hazardous ingredients for labelling:

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Symbol(s)



| H314 | Causes severe skin burns and eye damage. |
|-----------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| EUH071 | Corrosive to the respiratory tract. |
| contains: | Nitric acid% [C ≤ 70 %] |

2.3 **Other hazards**

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\ge 0,1\%$.

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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SECTION 3: Composition/information on ingredients

3.1 **Substances**

not relevant (mixture)

3.2 Mixtures

Description of the mixture

| Name of sub- stance | Identifier | Wt% | Classification acc. to GHS | Pictograms | Notes |
|----------------------------|---|------|--|------------|-------------------------|
| Nitric acid% [C ≤ 70 %] | CAS No 7697-37-2 EC No 231-714-2 Index No 007-030-00-3 | 6-<7 | Ox. Liq. 3 / H272 Met. Corr. 1 / H290 Acute Tox. 3 / H331 Skin Corr. 1A / H314 Eye Dam. 1 / H318 | | B(a) GHS-HC IOELV |

Notes

The classification refers to an aqueous solution B(a):

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/ 2008/EC, Annex VI) IOELV: Substance with a community indicative occupational exposure limit value

| Name of sub- stance | Identifier | Specific Conc. Limits | M-Factors | ATE | Exposure route |
|----------------------------|---|--|------------------|---------------------------------------|-------------------------|
| Nitric acid% [C ≤ 70 %] | CAS No 7697-37-2 EC No 231-714-2 Index No 007-030-00-3 | Ox. Liq. 3; H272: C ≥ 65 % Skin Corr. 1A; H314: C ≥ 20 % Skin Corr. 1B; H314: 5 % ≤ C < 20 % | - | 2,65 ^{mg} / _l /4h | inhalation: va- pour |

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 **Description of first aid measures**



General notes

Take off immediately all contaminated clothing. Self-protection of the first aider.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

After contact with skin, wash immediately with plenty of water. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Following eye contact

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. Protect uninjured eye.

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

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Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

4.2 Most important symptoms and effects, both acute and delayed

Corrosion, Gastric perforation, Risk of serious damage to eyes, Risk of blindness, Cough, Dyspnoea, Pulmonary oedema

4.3 Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Non-combustible.

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear full chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

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Advice on how to clean up a spill

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

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use extractor hood (laboratory). Handle and open container with care. Clear contaminated areas thoroughly.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep only in original container. May cause decomposition by long-term light influence.

Incompatible substances or mixtures

Observe hints for combined storage.

Protect against external exposure, such as

UV-radiation/sunlight, contact with air/oxygen

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

| Cou ntr y | Name of agent | CAS No | Identi- fier | TW A [pp m] | TWA [mg/ m³] | STE L [pp m] | STEL [mg/ m³] | Ceil ing- C [pp m] | Ceil- ing-C [mg/ m³] | Nota- tion | Source |
|-----------------|---------------|---------------|-----------------|----------------------|--------------------|-----------------------|---------------------|--------------------------------|-------------------------------|---------------|----------------|
| EU | nitric acid | 7697-37- 2 | IOELV | | | 1 | 2,6 | | | | 2006/15/ EC |
| MT | nitric acid | 7697-37- 2 | OELV | | | 1 | 2,6 | | | | CAP. 424 |

Notation

STEL

Ceiling-C Ceiling value is a limit value above which exposure should not occur

Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)





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Notation

Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection. Wear face protection.

Skin protection



hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. 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. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

FKM (fluoro rubber), Butyl caoutchouc (butyl rubber)

• material thickness

0,5 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: NO-P3 (against nitrous gases and particles, colour code: Blue/White).

Environmental exposure controls

Keep away from drains, surface and ground water.



according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

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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 Melting point/freezing point not determined Boiling point or initial boiling point and boiling ~100 °C at 1.013 hPa range Flammability non-combustible Lower and upper explosion limit not determined Flash point not determined not determined Auto-ignition temperature Decomposition temperature not relevant pH (value) <2 (20 °C) not determined Kinematic viscosity Solubility(ies) Water solubility miscible in any proportion Partition coefficient Partition coefficient n-octanol/water (log value): not relevant (inorganic) 23 hPa at 20 °C Vapour pressure Density and/or relative density Density ~1 ^g/_{cm³} at 20 °C Relative vapour density information on this property is not available Particle characteristics not relevant (liquid) Other safety parameters Oxidising properties none 9.2 Other information Information with regard to physical hazard classes: Corrosive to metals category 1: corrosive to metals Other safety characteristics:



according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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Miscibility

completely miscible with water

SECTION 10: Stability and reactivity

10.1 Reactivity

Substance or mixture corrosive to metals.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: Acetone, Aldehydes, Alkali (lye), Alkali metals, Alcohols, Formic acid, Amines, Ammonia (NH3), Aniline, Dichloromethane, Alkaline earth metal, Acetic anhydride, Hydrazine, Hydrocarbons, Metal powder, Nitriles, Reducing agents, Strong alkali, Hydrogen peroxide, => Explosive properties

10.4 Conditions to avoid

UV-radiation/sunlight. Keep away from heat.

10.5 Incompatible materials

different metals

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity estimate (ATE) of components of the mixture | | | | | |
|--|-----------|--------------------|---------------------------------------|--|--|
| Name of substance | CAS No | Exposure route | ΑΤΕ | | |
| Nitric acid% [C ≤ 70 %] | 7697-37-2 | inhalation: vapour | 2,65 ^{mg} / _l /4h | | |

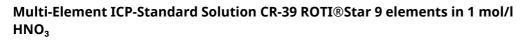
Acute toxicity of components of the mixture

| Name of substance | CAS No | Exposure route | Endpoint | Value | Species |
|-------------------------|-----------|-------------------------|----------|--|---------|
| Nitric acid% [C ≤ 70 %] | 7697-37-2 | inhalation: va- pour | LC50 | >2,65 ^{mg} / _l /4h | rat |

Skin corrosion/irritation

Causes severe skin burns and eye damage.

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

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

• If in eyes

causes burns, Causes serious eye damage, risk of blindness

• If inhaled

corrosive to the respiratory tract, cough, Dyspnoea, pulmonary oedema

• If on skin

causes severe burns, causes poorly healing wounds

Other information

none

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\ge 0,1\%$.

11.3 Information on other hazards

There is no additional information.

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

- **12.2 Persistence and degradability** Data are not available.
- **12.3 Bioaccumulative potential** Data are not available.
- 12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment Does not contain a PBT-/vPvB-substance in a concentration of $\ge 0,1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\ge 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

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

Properties of waste which render it hazardous

HP 6 acute toxicity

HP8 corrosive

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

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| TION 14 Transportinformation | |
|--|---|
| | |
| | |
| ADR | UN 3264 |
| IMDG-Code | UN 3264 |
| ICAO-TI | UN 3264 |
| UN proper shipping name | |
| ADR | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
| IMDG-Code | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
| ICAO-TI | Corrosive liquid, acidic, inorganic, n.o.s. |
| Technical name (hazardous ingredients) | Nitric acid% [C ≤ 70 %], Zinc nitrate |
| Transport hazard class(es) | |
| ADR | 8 |
| IMDG-Code | 8 |
| ICAO-TI | 8 |
| Packing group | |
| ADR | II |
| IMDG-Code | II |
| ICAO-TI | II |
| Environmental hazards | non-environmentally hazardous acc. to the dan- gerous goods regulations |
| Special precautions for user | |
| | |
| | struments |
| The cargo is not intended to be carried in bulk. | |
| Information for each of the UN Model Regulati | ons |
| Agreement concerning the International Carria information | age of Dangerous Goods by Road (ADR)Additional |
| Proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
| | IMDG-CodeICAO-TIUN proper shipping nameADRIMDG-CodeICAO-TITechnical name (hazardous ingredients)Transport hazard class(es)ADRIMDG-CodeICAO-TIPacking groupADRIMDG-CodeICAO-TIPacking groupADRIMDG-CodeICAO-TIPacking groupADRICAO-TIPacking groupADRICAO-TIInformental hazardsSpecial precautions for user Provisions for dangerous goods (ADR) should be compared in bulk.Information for each of the UN Model RegulatiAgreement concerning the International Carrier |

| | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
|---------------------------------------|--|
| Particulars in the transport document | UN3264, CORROSIVE LIQUID, ACIDIC, INORGAN-IC, N.O.S., (contains: Nitric acid% [C \leq 70 %], Zinc nitrate), 8, II, (E) |
| Classification code | C1 |
| Danger label(s) | 8 |
| | |
| Special provisions (SP) | 274 |
| Excepted quantities (EQ) | E2 |



according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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| Limited quantities (LQ) | 1 L |
|--|---|
| Transport category (TC) | 2 |
| Tunnel restriction code (TRC) | E |
| Hazard identification No | 80 |
| International Maritime Dangerous Goods Code (| IMDG) - Additional information |
| Proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
| Particulars in the shipper's declaration | UN3264, CORROSIVE LIQUID, ACIDIC, INORGAN- IC, N.O.S., (contains: Nitric acid% [C \leq 70 %], Zinc nitrate), 8, II |
| Marine pollutant | - |
| Danger label(s) | 8 |
| | |
| | |
| Special provisions (SP) | 274 |
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 1 L |
| EmS | F-A, S-B |
| Stowage category | В |
| Segregation group | 1 - Acids |
| International Civil Aviation Organization (ICAO- | IATA/DGR) - Additional information |
| Proper shipping name | Corrosive liquid, acidic, inorganic, n.o.s. |
| Particulars in the shipper's declaration | UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (contains: Nitric acid% [C \leq 70 %], Zinc nitrate), 8, II |
| Danger label(s) | 8 |
| | |
| Special provisions (SP) | A3 |
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 0,5 L |
| | Transport category (TC) Tunnel restriction code (TRC) Hazard identification No International Maritime Dangerous Goods Code (Proper shipping name Particulars in the shipper's declaration Marine pollutant Danger label(s) $\widehat{\qquad}$ Special provisions (SP) Excepted quantities (EQ) Limited quantities (LQ) EmS Stowage category Segregation group International Civil Aviation Organization (ICAO- Proper shipping name Particulars in the shipper's declaration Danger label(s) $\widehat{\qquad}$ Special provisions (SP) Excepted quantities (EQ) Limited quantities (EQ) Danger label(s) $\widehat{\qquad}$ Special provisions (SP) Excepted quantities (EQ) |

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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| Restrictions according to REACH, Annex XVII | | | | |
|--|--|--------|-------------|----|
| Dangerous substances with restrictions (REACH, Annex XVII) | | | | |
| Name of substance | Name acc. to inventory | CAS No | Restriction | No |
| Multi-Element | this product meets the criteria for classification in accordance with Reg- ulation No 1272/2008/EC | | R3 | 3 |
| Nitric acid% [C ≤ 70 %] | substances in tattoo inks and perman- ent make-up | | R75 | 75 |

Legend R3

1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they

a can be used as fuel in decorative oil lamps for supply to the general public, and
a present an aspiration hazard and are labelled with H304.
4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation

(CEN). 5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and pack-aging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following require-

aging of substances and mixtures, suppliers shall ensure, before the placing on the mane, and indelibly marked as ments are met: (a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage"; (b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage'; (c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.';



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| Legend | |
|--------|---|
| R75 | Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such stances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is |
| | are present in the following circumstances: |
| | (a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen catego 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration |
| | equal to or greater than 0,00005 % by weight; |
| | (b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxic |
| | category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % b weight; |
| | (c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser cat- |
| | egory 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight; |
| | (d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive cat- |
| | egory 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the |
| | substance is present in the mixture in a concentration equal to or greater than: (i) 0,1 % by weight, if the substance is used solely as a pH regulator; |
| | (ii) 0,01 % by weight, in all other cases; |
| | (e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in th |
| | mixture in a concentration equal to or greater than 0,00005 % by weight; (f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g |
| | (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in th |
| | mixture in a concentration equal to or greater than 0,00005 % by weight: |
| | (i) "Rinse-off products"; (ii) "Not to be used in products applied on mucous membranes"; |
| | (iii) "Not to be used in eye products"; |
| | (g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for ι preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is presen |
| | the mixture in a concentration, or in some other way, that does not accord with the condition specified in that colu |
| | (h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a conc |
| | tration equal to or greater than the concentration limit specified for that substance in that Appendix. 2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the n |
| | ture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures com- |
| | monly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the ai |
| | making a mark or design on his or her body. 3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictes |
| | concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appen |
| | 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance. |
| | 4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023: |
| | (a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8); |
| | (b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6). 5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a |
| | stance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such |
| | that it then falls within a different one of those points from the one within which it fell previously, and the date of plication of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, pa |
| | graph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated a |
| | taking effect on the date of application of that new or revised classification. |
| | 6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the list of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or |
| | such that it then falls within a different one of those points from the one within which it fell previously, and the |
| | amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from t |
| | date falling 18 months after entry into force of the act by which that amendment was made. |
| | 7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022 |
| | mixture is marked with the following information: (a) the statement "Mixture for use in tattoos or permanent make-up"; |
| | (b) a reference number to uniquely identify the batch; |
| | (c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient |
| | names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients |
| | be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" mea |
| | any substance added during the process of formulation and present in the mixture for use for tattooing purposes purities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning o |
| | this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingr |
| | ent does not need to be marked in accordance with this Regulation; |
| | (d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1; (e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentr |
| | tion limit specified in Appendix 13; |
| | (f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) bel |
| | the concentration limit specified in Appendix 13; (g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) |
| | 1272/2008. |
| | The information shall be clearly visible, easily legible and marked in a way that is indelible. |
| | The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on t market, unless the Member State(s) concerned provide(s) otherwise. |
| | Where necessary because of the size of the package, the information listed in the first subparagraph, except for p |
| | |
| | (a), shall be included instead in the instructions for use. |
| | (a), shall be included instead in the instructions for use. Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing procedure with the information marked on the package or included in the instructions for use pursuant to this par |



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Legend

8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device. The requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

| 2012/18/EU (Seveso III) | | | |
|-------------------------|---------------------------------------|---|-------|
| Νο | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements | Notes |
| | not assigned | | |

Deco-Paint Directive

| VOC content | 0 % |
|--|-------------------------------|
| VOC content (Water content was discounted) | 0 ^g / _l |

Industrial Emissions Directive (IED)

| VOC content | 0 % |
|--|-------------------|
| VOC content (Water content was discounted) | 0 ^g /l |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Regulation on the marketing and use of explosives precursors

| Explosives precursors which are subject to restrictions | | | | | | |
|---|-----------|-----|----------------------|--------------|----------------|--|
| Name of substance | CAS No | Wt% | Type of registration | Re- marks | Limit value | Upper limit value for the pur- pose of licens- ing un- der Art- icle 5(3) |
| Nitric acid% [C ≤ 70 %] | 7697-37-2 | 6,3 | Annex I | | 3 % w/w | 10 % w/w |



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annex I

Substances which shall not be made available to members of the general public on their own, or in mixtures or substances including them, except if the concentration is equal to or lower than the limit values set out below

Additional statements

If the product is passed on to third parties, in accordance with Article 7 "Notification of the supply chain" of Regulation EU 2019/1148, the information obligation is subject to the entire supply chain and all other provisions mentioned in Article 7 on restricted and regulated raw materials.

Regulation on drug precursors

none of the ingredients are listed

Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

| Country | Inventory | Status |
|---------|------------|-------------------------------------|
| AU | AIIC | all ingredients are listed |
| CA | DSL | all ingredients are listed |
| CN | IECSC | all ingredients are listed |
| EU | ECSI | all ingredients are listed |
| EU | REACH Reg. | all ingredients are listed |
| JP | CSCL-ENCS | all ingredients are listed |
| JP | ISHA-ENCS | not all ingredients are listed |
| KR | KECI | all ingredients are listed |
| MX | INSQ | all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | all ingredients are listed |
| TR | CICR | not all ingredients are listed |
| ΤW | TCSI | all ingredients are listed |
| US | TSCA | all ingredients are listed (ACTIVE) |

Legend AIIC

Australian Inventory of Industrial Chemicals Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) CICR CSCL-ENCS

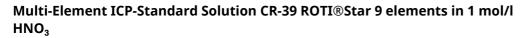
 DSL
 Domestic Substances List (DSL)

 ECSI
 EC Substance Inventory (EINECS, ELINCS, NLP)

 IECSC
 Inventory of Existing Chemical Substances Produced or Imported in China

 INSQ
 National Inventory of Chemical Substances

 ISHA-ENCS
 Inventory of Existing and New Chemical Substances (ISHA-ENCS)



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| Legend | |
|------------|---|
| KECI | Korea Existing Chemicals Inventory |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |
| REACH Reg. | REACH registered substances |
| TCSI | Taiwan Chemical Substance Inventory |
| TSCA | Toxic Substance Control Act |

15.2 Chemical safety assessment

According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

SECTION 16: Other information

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|------------|--|
| 2006/15/EC | Commission Directive establishing a second list of indicative occupational exposure limit values in imple mentation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC |
| Acute Tox. | Acute toxicity |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concern ing the International Carriage of Dangerous Goods by Road) |
| ATE | Acute Toxicity Estimate |
| CAP. 424 | Occupational Health and Safety Authority Act (CAP. 424) |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances |
| Ceiling-C | Ceiling value |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an iden fier of substances commercially available within the EU (European Union) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| Eye Dam. | Seriously damaging to the eye |
| Eye Irrit. | Irritant to the eye |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na tions |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |



according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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| Abbr. | Descriptions of used abbreviations |
|-------------|---|
| index No | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |
| IOELV | Indicative occupational exposure limit value |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| Met. Corr. | Substance or mixture corrosive to metals |
| NLP | No-Longer Polymer |
| Ox. Liq. | Oxidising liquid |
| РВТ | Persistent, Bioaccumulative and Toxic |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| STEL | Short-term exposure limit |
| SVHC | Substance of Very High Concern |
| TWA | Time-weighted average |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text |
|------|--|
| H272 | May intensify fire; oxidiser. |
| H290 | May be corrosive to metals. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H331 | Toxic if inhaled. |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.