

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2****SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier:** SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2**Other means of identification:**

Non-applicable

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

Relevant uses: Used in Spectrophotometry. For industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3

**1.3 Details of the supplier of the safety data sheet:**

3S Analyzers Srl  
 Via Molino Nuovo 12  
 16036 Avegno - Ge - Italy  
 Phone: +390185799024  
 SDS@3s-analyzers.eu  
 www.3s-analyzers.eu

**1.4 Emergency telephone number:****SECTION 2: HAZARDS IDENTIFICATION \*\*****2.1 Classification of the substance or mixture:****CLP Regulation (EC) No 1272/2008:**

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Acute Tox. 4: Acute inhalation toxicity, Category 4, H332

Eye Dam. 1: Serious eye damage, Category 1, H318

Met. Corr. 1: Corrosive to metals, Category 1, H290

Skin Corr. 1B: Skin corrosion, Category 1B, H314

**2.2 Label elements:****CLP Regulation (EC) No 1272/2008:****Danger****Hazard statements:**

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

H332 - Harmful if inhaled.

**Precautionary statements:**

P234: Keep only in original packaging.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.

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

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

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

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.

**Supplementary information:**

EUH071: Corrosive to the respiratory tract.

**Substances that contribute to the classification**

Nitric acid

**2.3 Other hazards:**

Product does not meet PBT/vPvB criteria

Endocrine-disrupting properties: The product does not meet the criteria.

*\*\* Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

### SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\*

**3.1 Substance:**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture of substances

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 7697-37-2 EC: 231-714-2 Index: 007-004-00-1 REACH: 01-2119487297-23-XXXX	<b>Nitric acid<sup>(1)</sup></b>	Self-classified
	Regulation 1272/2008 Acute Tox. 3: H331; Met. Corr. 1: H290; Ox. Liq. 2: H272; Skin Corr. 1A: H314; EUH071 - Danger	

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**Other information:**

Identification	Specific concentration limit
Nitric acid CAS: 7697-37-2 EC: 231-714-2	% (w/w) >=99: Ox. Liq. 2 - H272 65<= % (w/w) <99: Ox. Liq. 3 - H272 % (w/w) >=20: Skin Corr. 1A - H314 5<= % (w/w) <20: Skin Corr. 1B - H314 1<= % (w/w) <5: Skin Irrit. 2 - H315 % (w/w) >=5: Eye Dam. 1 - H318

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity	Genus
Nitric acid CAS: 7697-37-2 EC: 231-714-2	LD50 oral	Non-applicable
	LD50 dermal	Non-applicable
	LC50 inhalation	3 mg/L (ATEi)

\*\* Changes with regards to the previous version

#### SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures:**

Request medical assistance immediately, showing the SDS of this product.

**By inhalation:**

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

- CONTINUED ON NEXT PAGE -

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2****SECTION 4: FIRST AID MEASURES (continued)****4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media:****Suitable extinguishing media:**

Product is non-flammable under normal conditions of storage, handling and use. Use preferably water.

**Unsuitable extinguishing media:**

Non-applicable

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

**For emergency responders:**

Wear protective equipment. Keep unprotected persons away. See section 8.

**6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling:****A.- General precautions for safe use**

Comply with the current legislation concerning the prevention of industrial risks. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used. KEEP ONLY IN ORIGINAL PACKAGING.

**B.- Technical recommendations for the prevention of fires and explosions**

It is recommended to transfer at a slow speed to avoid the creation of electrostatic charges that could affect flammable products. Consult section 10 for conditions and materials that should be avoided.

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

### SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2

#### SECTION 7: HANDLING AND STORAGE (continued)

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

#### 7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 20 °C

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

#### 7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

##### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	IOELV (8h)		
Nitric acid CAS: 7697-37-2 EC: 231-714-2	IOELV (STEL)	1 ppm	2,6 mg/m <sup>3</sup>

##### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Nitric acid CAS: 7697-37-2 EC: 231-714-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	2,6 mg/m <sup>3</sup>	Non-applicable	2,6 mg/m <sup>3</sup>

##### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Nitric acid CAS: 7697-37-2 EC: 231-714-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	1,3 mg/m <sup>3</sup>	Non-applicable	1,3 mg/m <sup>3</sup>

##### PNEC:

Non-applicable

##### 8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)		EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield		EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer 's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer 's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m <sup>3</sup> (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2****SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)****9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Transparent
Colour:	Colourless
Odour:	Acre
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	97 °C
Vapour pressure at 20 °C:	2544 Pa
Vapour pressure at 50 °C:	13131,81 Pa (13,13 kPa)
Evaporation rate at 20 °C:	Non-applicable *

**Product description:**

Density at 20 °C:	1083,9 kg/m <sup>3</sup>
Relative density at 20 °C:	1,084
Dynamic viscosity at 20 °C:	1,02 cP
Kinematic viscosity at 20 °C:	0,94 mm <sup>2</sup> /s
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

**Flammability:**

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

**Particle characteristics:**

Median equivalent diameter:	Non-applicable
-----------------------------	----------------

**9.2 Other information:****Information with regard to physical hazard classes:**

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	H290 May be corrosive to metals.
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

**Other safety characteristics:**

Surface tension at 20 °C:	Non-applicable *
---------------------------	------------------

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2****SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Refraction index: Non-applicable \*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Precaution	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION \*\*****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

**A- Ingestion (acute effect):**

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for consumption. For more information see section 3
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

**B- Inhalation (acute effect):**

- Acute toxicity : Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Corrosivity/Irritability: Corrosive to the respiratory tract

**C- Contact with the skin and the eyes (acute effect):**

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

**D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):**

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.  
IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2****SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)****E- Sensitizing effects:**

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**F- Specific target organ toxicity (STOT) - single exposure:**

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**G- Specific target organ toxicity (STOT)-repeated exposure:**

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**H- Aspiration hazard:**

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	LD50 oral	Non-applicable	
Nitric acid	LD50 dermal	Non-applicable	
CAS: 7697-37-2	LC50 inhalation	3 mg/L (ATEI)	
EC: 231-714-2			

**Acute Toxicity Estimate (ATE mix):**

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	20 mg/L (4 h) (Calculation method)	0 %

**11.2 Information on other hazards:****Endocrine disrupting properties**

Endocrine-disrupting properties: The product does not meet the criteria.

**Other information**

Non-applicable

\*\* Changes with regards to the previous version

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**12.1 Toxicity:**

Not available

**12.2 Persistence and degradability:**

Not available

**12.3 Bioaccumulative potential:**

Not available

**12.4 Mobility in soil:**

Not available

**12.5 Results of PBT and vPvB assessment:**

Product does not meet PBT/vPvB criteria

- CONTINUED ON NEXT PAGE -

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2****SECTION 12: ECOLOGICAL INFORMATION (continued)****12.6 Endocrine disrupting properties:**

Endocrine-disrupting properties: The product does not meet the criteria.

**12.7 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 06*	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals	Dangerous

**Type of waste (Regulation (EU) No 1357/2014):**

HP6 Acute Toxicity, HP8 Corrosive

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

**SECTION 14: TRANSPORT INFORMATION \*\*****Transport of dangerous goods by land:**

With regard to ADR 2023 and RID 2023:



- 14.1 UN number or ID number:** UN2031  
**14.2 UN proper shipping name:** NITRIC ACID  
**14.3 Transport hazard class(es):** 8  
 Labels: 8  
**14.4 Packing group:** II  
**14.5 Environmental hazards:** No  
**14.6 Special precautions for user**  
 Special regulations: Non-applicable  
 Tunnel restriction code: E  
 Physico-Chemical properties: see section 9  
 Limited quantities: 1 L  
**14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 40-20:

Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2**

**SECTION 14: TRANSPORT INFORMATION \*\* (continued)**



- 14.1 UN number or ID number:** UN2031
- 14.2 UN proper shipping name:** NITRIC ACID
- 14.3 Transport hazard class(es):** 8  
Labels: 8
- 14.4 Packing group:** II
- 14.5 Marine pollutant:** No
- 14.6 Special precautions for user**  
Special regulations: Non-applicable  
EmS Codes: F-A, S-Q  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L  
Segregation group: SGG1
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2023:



- 14.1 UN number or ID number:** UN2031
- 14.2 UN proper shipping name:** NITRIC ACID
- 14.3 Transport hazard class(es):** 8  
Labels: 8
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**  
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

\*\* Changes with regards to the previous version

**SECTION 15: REGULATORY INFORMATION**

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable  
 Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable  
 Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable  
 Article 95, REGULATION (EU) No 528/2012: Non-applicable  
 REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

Non-applicable

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Contains more than 3 % of Nitric acid by weight. These are not to be made available to, introduced, possessed or used by members of the general public unless their concentration is below specific limits. Product under the provisions of Article 9.

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

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Contains Nitric acid. Product under the provisions of Article 9. However, products that contain explosives precursors only to such a small extent and in such complex mixtures that the extraction of the explosives precursors is technically extremely difficult should be excluded from the scope of this Regulation.

**Specific provisions in terms of protecting people or the environment:**

- CONTINUED ON NEXT PAGE -

**SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2****SECTION 15: REGULATORY INFORMATION (continued)**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: OTHER INFORMATION \*\*****Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11):

- New declared substances  
Nitric acid (7697-37-2)
- Removed substances  
Nitric acid [c ≤ 70 %] (7697-37-2)

Substances that contribute to the classification (SECTION 2):

- New declared substances  
Nitric acid (7697-37-2)
- Removed substances  
Nitric acid [c ≤ 70 %] (7697-37-2)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Hazard statements
- Precautionary statements
- Supplementary information

TRANSPORT INFORMATION (SECTION 14):

- UN number

**Texts of the legislative phrases mentioned in section 2:**

H290: May be corrosive to metals.  
H318: Causes serious eye damage.  
H332: Harmful if inhaled.  
H314: Causes severe skin burns and eye damage.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 3: H331 - Toxic if inhaled.  
Met. Corr. 1: H290 - May be corrosive to metals.  
Ox. Liq. 2: H272 - May intensify fire, oxidiser.  
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.

**Classification procedure:**

Eye Dam. 1: Calculation method  
Acute Tox. 4: Calculation method  
Skin Corr. 1B: Calculation method

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

### SI4-CL-R2SZ - DETERMINATION OF SILICA REAGENT 2

#### SECTION 16: OTHER INFORMATION \*\* (continued)

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
LogPOW: Octanolwater partition coefficient  
Koc: Partition coefficient of organic carbon  
UFI: unique formula identifier  
IARC: International Agency for Research on Cancer

*\*\* Changes with regards to the previous version*

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -