

SAFETY DATA SHEET 127

NANO SILICA SEALER

1 IDENTIFICATION OF THE MIXTURE AND THE COMPANY

1.1 Product identifier

Product name NANO SILICA SEALER

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

Description/Application PROTECTIVE

1.3 Details of the supplier of the safety data sheet

Name: BERICALCE S.R.L.

Full address: Via Piave, 23 - 36033 Isola Vicentina (VI) - Italia

Phone: +39 0444 929102

+39 0444 654919

E-mail address of the competent person responsible to the Safety Data Sheet

nfo@bericalce.it

1.4 Emergency telephone number

For urgent inquiries refer to SANITARY EMERGENCY

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

The product is not classified as hazardous according to the provisions of Regulation (EC) 1272/2008 (CLP). This safety data sheet has been prepared in accordance with Regulation (EC) No. 1907/2006, as amended by Regulation (EU) 2020/878.

Hazard classification and indication:
Not classified as hazardous.

2.2 Label elements

Danger labeling: -

Warnings: -

Hazard indication:

EUH210 Material Safety Data Sheet available upon request.

Safety advice: -

2.3 Other dangers

PBT and vPvB assessment:

This substance/mixture contains no components that are considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Information not relevant.

3.2 Miscele

Contains:

Identification	Conc. %	67/548/EEC Classification. Classification 1272/2008 (CLP).
<u>Ethanol</u>		
CAS. 64-17-5	1 - 3	Flam. Liq. 2; H225 - Eye Irrit. 2; H319
EC. 200-578-6		

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For the full text of the hazard statements mentioned in this paragraph, refer to paragraph 16.

REACH - List of substances of very high concern candidates for authorization (Article 59).

Status:

Not applicable

4 FIRST AID MEASURES

4.1 Description of first aid measures

EYES: Remove any contact lenses. Wash immediately and thoroughly with water

for at least 30 to 60 minutes, opening the eyelids widely. Seek immediate medical attention.

SKIN: Remove contaminated clothing. Shower immediately. Seek immediate medical advice.

INGESTION: Have as much water as possible drunk. Seek immediate medical attention.

Do not induce vomiting unless expressly authorized by physician.

INHALATION: Take the subject to fresh air, away from the site of the accident.

In case of respiratory symptoms: seek medical attention.

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

No information is available.

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

Follow the doctor's directions.

5 FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING MEDIA

Foaming agent, Chemical powder

UNSUITABLE EXTINGUISHING MEDIA

Abundant water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards against fire / Specific hazards arising from chemical composition:

Water spraying may be ineffective unless used by experienced firefighters.

Combustion products: Oxides of carbon

5.3 Advice for firefighters

Special protective equipment for firefighters:

In case of fire, wear breathing apparatus with independent air supply.

Additional information:

For safety reasons in case of fire, packages should be stored separately in closed containers.

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6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

In case of airborne vapors or dusts, adopt respiratory protection. These directions apply for both work crews and emergency responders.

6.2 Environmental precautions

Prevent the product from entering sewers, surface water, groundwater.

6.3 Methods and material for containment and cleaning up

Embank with soil or inert material. Collect most of the material and remove the residue with water jets. Disposal of contaminated material should be carried out in accordance with the provisions of item 13.

6.4 Reference to other sections

Any information regarding personal protection and disposal can be found in Sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid the formation of aerosols. Store away from flames and sparks - Do not smoke. Use tools that are non-sparking. Take preventive measures to avoid the production of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Prohibited to smoke. Keep in a well-ventilated place. Store in sealed containers made of anti-corrosive material.

Minimum storage temperature: Avoid temperatures below: 5 °C

Maximum storage temperature: 35 °C

Other information: No decomposition

7.3 Specific end use(s)

None in particular

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

<u>Components</u>	<u>CAS</u>	<u>No. Value</u>	<u>Controls parameters</u>	<u>Update</u>	<u>Basis</u>	<u>Exposure Type</u>
Ethanol	64-17-5	TWA	1 000 ppm	2013-10-08	NIOSH REL	
			1 900 mg/m3			
		TWA	1 000 ppm	1997-08-04	OSHA Z-1	
Further information: (b): The value in mg/m3 is approximate.			1 900 mg/m3			
		TWA	1 000 ppm			
			1 900 mg/m3	1989-01-19	OSHA P0	
Further information: Upper Respiratory Tract irritation		STEL	1 000 ppm	2013-03-01	ACGIH	

A3: Confirmed animal carcinogen with unknown relevance to humans

ACGIH: American Conference of Governmental Industrial Hygienists

AGW: Arbeitsplatzgrenzwert

BEI: Biological Exposure Index

MAC: Maximum Allowable Concentration

NIOSH: National Institute for Occupational Safety and Health

OEL: OEL: limite di esposizione sul postodi lavoro.

STEL: Valori limite di esposizione, breve termine

TRGS: Technische Regel für Gefahrstoffe

TWA: Time-weighted average (TWA)

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Derived no-effect level (DNEL) according to Regulation (EC) No. 1907/2006

Name of the substance	Final use	Route of exposure	Potential consequences on health	Value
Ethanol	Workers	Inhalation	Acute local effects	1900 mg/m ³
	Workers	Skin contact	Systemic effects long-term	343 mg/kg p.c./giorno
	Workers	Inhalation	Systemic effects long-term	960 mg/m ³
	Consumers	Inhalation	Effetti locali acuti	960 mg/m ³
	Consumers	Skin contact	Systemic effects long-term	206 mg/kg p.c./day
	Consumers	Ingestion	Systemic effects long-term	87 mg/kg p.c./day

Concentrazione prevedibile priva di effetti (PNEC) secondo il Regolamento (CE) Num. 1907/2006

Substance name	Environmental compartment	Value
Ethanol	Fresh water	0.96 mg/l
	Seawater	0.79 mg/l
	Intermittent water	2.75 mg/l
	Sewage treatment plant	580 mg/l
	Freshwater sediment	3.6 mg/kg dry weight
	Marine sediment	2.9 mg/kg dry weight
	Soil	0.63 mg/kg dry weight
	Secondary poisoning	720 mg/kg food

8.2 Exposure controls

Appropriate technical control equipment

For outdoor handling, devices with local exhaust ventilation should be used.

HAND PROTECTION.

PVC - Rubber gloves.

SKIN PROTECTION.

Use of protective clothing.

EYE/FACE PROTECTION

Wearing eye/face protection. (DIN EN 166)

RESPIRATORY PROTECTION.

No respiratory protective equipment is normally required.

ENVIRONMENTAL EXPOSURE CONTROLS.

No special precautionary measures are required for environmental protection.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid
Colour	Limpid
Odour	Odorless
Odour threshold	Not available
pH	5 - 9
Melting point / freezing point	0 °C
Initial boiling point	Not available
Boiling range	100°C
Flash point	60,5 - 93 °C
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Lower inflammability limit	Not applicable
Upper inflammability limit	Not applicable
Lower explosive limit	Not explosive
Upper explosive limit	Not explosive
Vapour pressure	nearly 23 hPa at 20 °C
Vapour density	Not available
Relative density	Not available
Solubility	Partially miscible in water
Partition coefficient:: n-octanol/water	Not available
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Viscosity	< 10 mPa.s at 20 °C
Explosive properties	Not explosive
Oxidising properties	Non-oxidant

9.2 Other information

The safety sheet contains only safety-related information and does not replace any information on product specifications.

10 STABILITY AND REACTIVITY

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical stability

The product is stable in normal conditions of use and storage.

10.3 Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4 Conditions to avoid

Avoid letting the solution dry out as this may cause a buildup of dust.
Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid: Mild steel, Aluminum, Copper

10.6 Hazardous decomposition products

Hazardous decomposition products: No known hazardous decomposition compounds.
Thermal decomposition: No data available

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11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Not classifiable based on available information.

Irritant and corrosive effect

Not classifiable based on available information.

Sensitizing effects

Respiratory sensitization: Not classifiable based on available information.

Skin sensitization: Not classifiable based on available information.

Carcinogenic, mutagenic and reproductive toxic effects

Not classifiable based on available information.

Specific target organ toxicity with single exposure

Not classifiable based on available information.

Specific target organ toxicity with repeated exposure

Not classifiable based on available information.

Aspiration hazard

Not classifiable based on available information.

Practical experience

Other observations

No information available.

Assay result

Acute oral toxicity: LD50: > 5 000 mg/kg Species: Rat

Value estimated from tests on similar products.

Respiratory or skin sensitization: Result: Does not cause sensitization in laboratory animals.

Method: (Magnusson-Kligman):

Estimated value based on tests on similar products.

Germ cell mutagenicity.

In vitro genotoxicity: ames test.

Result: negative

Method: OECD Test Guideline 471.

Value estimated from tests on similar products.

Toxicological data for components:

Ethanol

Acute toxicity:

Acute oral toxicity: LD50: 10 470 mg/kg Species: Rat

Method: OECD Test Guideline 401.

Documentation data.

Acute inhalation toxicity: LC50 (Rat, male): 116.9 mg/l

Exposure time: 4 h Test atmosphere: vapor

Method: 403 Guidelines for the OECD Test.

Documentation data.

Skin corrosion/irritation: Species: On rabbit

Result: No skin irritation

Method: 404 Guidelines for the OECD Test.

Documentation data.

Serious eye injury/irritation: Species: On rabbit

Result: Irritating to the eye.

Method: 405 Guidelines for the OECD Test.

Documentation data.

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Respiratory or skin sensitization: Species: Mouse

Result: Does not cause skin sensitization.

Method: OECD Test Guideline 429.

Documentation Data.

Germ cell mutagenicity.

In vitro genotoxicity: ames test.

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471.

Documentation data.

12 ECOLOGICAL INFORMATION

Additional ecological information:

Not known > 100 mg/l/96h Fish

12.1 Toxicity

Assay Result.

Fish toxicity: LC50: > 5 000 mg/l

Exposure time: 96 h

Species: Danio rerio (zebrafish)

Value estimated from tests on similar products.

Toxicity to daphnia and other aquatic invertebrates: EC50: 7 600 mg/l

Exposure time: 48 h

Species: Ceriodaphnia dubia (water flea).

Value estimated from tests on similar products.

Toxicity to algae: NOEC: 60 mg/l

Exposure time: 48 h

Species: Selenastrum capricornutum (green alga).

Estimated value based on tests on similar products.

EC50: 120 mg/l

Exposure time: 48 h

Species: Selenastrum capricornutum (green seaweed).

Estimated value based on tests on similar products.

EC10: 140 mg/l

Exposure time: 48 h

Species: Selenastrum capricornutum (green seaweed).

Estimated value based on tests on similar products.

Components: Assay result.

Ethanol

Fish toxicity: LC50: 14 200 mg/l

Exposure time: 96 h

Species: Pimephales promelas (American chub)

Test type: Continuous flow test

Documentation Data.

Toxicity to daphnia and other aquatic invertebrates: EC50: 5 012 mg/l

Exposure time: 48 h

Species: Ceriodaphnia dubia (water flea)

Test type: Static test

Documentation data.

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Toxicity to algae: CE50r: 275 mg/l

Exposure time: 72 h

Species: *Chlorella vulgaris* (Freshwater algae).

Method: OECD TG 201

Documentation data.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 9.6 mg/l

Exposure time: 9 d

Species: *Daphnia magna* (Large water flea)

Test type: Semi-static test

Documentation data.

12.2 Persistence and degradability

Product Information:

Biodegradability:

Result: Not applicable
non-organic

Components:

Ethanol

Biodegradability:

Result: Readily biodegradable.
Documentation data.

12.3 Bioaccumulative potential

Product information:

Bioaccumulation:

Bioaccumulation is unlikely.

Components:

Ethanol

Bioaccumulation:

Bioaccumulation is unlikely.

12.4 Mobility in soil

Product information:

Mobility: No test results

In extreme cases, transport from land to sea is permissible

Dissemination in various environmental compartments: Transport by air is not allowed.

Components:

Ethanol

Mobility:

No data available

12.5 Results of PBT and vPvB assessment

Product Information:

PBT and vPvB assessment: This substance/mixture does not contain components that are considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

Components:

Ethanol

PBT and vPvB assessment:

This substance is not considered to be a persistent, bioaccumulative and toxic (PBT)

This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Product information:

Required biochemical oxygen (BOD): No data available

Components:

Ethanol

Biochemical oxygen required (BOD): No data available

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13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:

Do not arrange drains into the sewage system.

Do not contaminate ponds, waterways or ditches with the product chemical or the container used.

Dispose of the contents/container in compliance with the local regulations.

Contaminated containers:

Empty residual contents.

Dispose of as unused product.

Empty containers should be transported to an authorized site for recycling or disposal.

14 TRANSPORT INFORMATION

14.1 ONU number

Not regulated as dangerous goods

14.2 ONU shipping name

Not regulated as dangerous goods

14.3 Hazard classes connected to shipping

Not regulated as dangerous goods

14.4 Packaging group

Not regulated as dangerous goods

14.5 Environmental hazards

Not regulated as dangerous goods

14.6 Special precautions for users

Remarks: Not dangerous goods within the meaning of transport regulations.

14.7 Shipping of bulk according to MARPOL 73/78 annex and the IBC code

Not applicable to the product in its supplied form.

15 REGULATORY INFORMATION

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

Major Accident Hazards Legislation: Seveso Directives

2012/18/EU

Not applicable

Water contamination class (Germany): nwg non-water pollutant

Notification status.

CH INV: NO. Not inventory compliant

TSCA: YES. All chemicals in this product are listed on the TSCA Inventory or in accordance with a TSCA Inventory exemption

DSL: NO. This product contains the following components that are not listed on either the NDSL or DSL list Canadian.

AICS: NO. Not inventory compliant

NZIoC: NO. Present on inventory, or in accordance with inventory.

ENCS: NO. Not in accordance with the inventory

ISHL: YES. Present on inventory, or in accordance with inventory.

KECI: YES. Present on inventory, or in accordance with inventory.

PICCS: NO. Not in accordance with inventory

IECSC: YES. Present on inventory, or in accordance with inventory.

For explanation of acronyms, see section 16.

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Further information

Legislative Decree No. 52 of February 3, 1997 (Implementation of Directive 92/32/EEC on classification, packaging and labeling of dangerous substances.) as amended.

Legislative Decree No. 65 of March 14, 2003 (Implementation of Directives 1999/45/EC and 2001/60/EC on classification, packaging and labeling of dangerous preparations) and as amended.

Legislative Decree No. 81 of April 9, 2008 (Implementation of Article 1 of Law No. 123 of August 3, 2007, regarding the protection of health and safety in the workplace.) as amended and supplemented.

Legislative Decree No. 152 of April 3, 2006, (environmental regulations) and amendments and additions.

Legislative Decree Feb. 6, 2009, no. 21 (Regulations implementing the provisions of Regulation (EC) no. 648/2004 on detergents)

Prepared in accordance with EEC directives.

15.2 Chemical safety assessment

Ethanol: No information available.

16 OTHER INFORMATION

LEGEND:

Full text of the hazard statements (H) cited in sections 2 - 3.

H225: Highly flammable liquid and vapors.

H319: Causes severe eye irritation.

Full text of other abbreviations

(Q)SAR - (Quantitative) structure-activity relationships;

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways;

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road;

ASTM - American Society for Testing of Materials; bw - Body weight;

CLP - Classification, labeling and packaging regulation; Regulation (EC) No. 1272/2008;

DIN - Standard of the German Institute for Standardization;

ECHA - European Chemicals Agency;

EC-Number - European Community Number;

ECx - Concentration associated with x% response rate;

ELx - Loading rate associated with x% response;

EmS - Emergency program;

ErCx - Concentration associated with x% response rate of growth;

GHS - Globally Harmonized System;

IARC - International Agency for Research on Cancer;

IATA - International Air Transport Association;

IBC - International Code for the Construction and Equipment of Ships Carrying Hazardous Chemicals in Bulk;

IC50 - Half of the maximum inhibitory concentration;

ICAO - International Civil Aviation Organization;

IMDG - International Maritime for the Transport of Dangerous Goods;

IMO - Maritime Organization

ISO - International Organization for Standardization;

LC50 - 50% lethal concentration for a test population;

LD50 - 50% lethal dose for a test population (median lethal dose);

MARPOL - International Convention for the Prevention of Pollution from Ships;

n.o.s. - not otherwise specified;

NO(A)EC - Concentration with no observed (adverse) effects;

NO(A)EL - Level with no observed (adverse) effects;

NOELR - No observed effects load share;

OECD - Organization for Economic Cooperation and Development;

OPPTS - Office of Chemical Safety and Pollution Prevention;

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PBT - Persistent, bioaccumulative and toxic substance;
REACH - Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals;
RID - Regulations concerning the international carriage of dangerous goods by rail;
SADT - Self-accelerating decomposition temperature;
SDS - Material Safety Data Sheet;
TRGS - Technical regulation for hazardous substances;
UN - United Nations; vPvB - Very persistent and very bioaccumulative;
DSL - Domestic Substance List (Canada);
KECI - Korean Inventory of Existing Chemical Substances;
TSCA - Toxic Substances Control Act (United States);
AICS - Australian Inventory of Chemical Substances;
IECSC - China Inventory of Existing Chemical Substances;
ENCS - Existing and New Chemical Substances (Japan);
ISHL - Industrial Safety and Health Law (Japan);
PICCS - Inventory of Chemical Substances of the Philippines;
NZIoC - Inventory of Chemical Substances of New Zealand;
TCSI - Taiwan Chemical Substance Inventory;
CMR - Carcinogenic, mutagenic or toxic to reproduction;
GLP - Good Laboratory Practice.

GENERAL BIBLIOGRAPHY:

1. Directive 1999/45/EC and subsequent amendments
2. Directive 67/548/EEC and subsequent amendments and adaptations
3. Regulation (EC) 1907/2006 of the European Parliament (REACH)
4. Regulation (EC) 1272/2008 of the European Parliament (CLP)
5. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 of the European Parliament (II Atp. CLP)
8. Regulation (EC) 618/2012 of the European Parliament (III Atp. CLP)
9. Regulation (EU) 2020/878

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version.

Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations.

The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

BeriCalce S.r.l.

Via Piave, 23 - 36033 Isola Vicentina (VI) - ITALIA

Tel1. (+39) 0444 929102 - Tel2. (+39) 0444 654919

Skype: bericalce - info@bericalce.com

bericalce.com