Date: 2022-01-31 Former date:

This data sheet contains changes from the previous version "*"



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

- 1.1 Product identifier / Commercial Product Name: BalcoNano Coating
- 1.2 Relevant identified uses of the substance or mixture and uses advised against: None known.

Professional Use of the Substance/Preparation: Coating for glass / ceramics

Chemical nature of the preparation: Acidic ethanolic chemical solution with functional additives

1.3 Details of the manufacturer / supplier of the safety data sheet:

Address: Manufacturer, supplier:

Balconette, Unit 6 Systems House, Eastbourne Road, Blindley Heath, RH76JP Lingfield, Surrey, Great Britain,

Telephone: 01342-410411, Telefax: 01342-410412

Information department: Department laboratory, eMail: Enquiries@balconette.co.uk

Responsible for the safety data sheet: :

CHEMCO123 ® – Chemical Consultancy, graduate chemist Rosemarie Fechner, Telephone: + 49 5221 6935980 e-mail: info@chemco123.de

1.4 Emergency telephone number:

Emergency - Telephone of Company / Undertaking: Local hospital

SECTION 2: Hazards identification

2.1 Classification:

Hazard-determining component for labeling: Ethanol

Hazard Statement	Hazard Class and - Category	
H225 - Highly flammable liquid and vapour.	Flamm. Liquid 2	
H319 - Causes serious eye irritation.	Eye Irrit. 2	

2.2 Label elements:



Danger

Highly flammable liquid and vapour. Causes serious eye irritation.

Keep away from heat/sparks/open flames/hotsurfaces. No smoking.

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Store in a well-ventilated place. Keep container tightly closed.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Dispose of contents / container to a recognized disposal company.

2.3 Other hazards:

Human experience:

In use, may form flammable/explosive vapour-air mixture. Prolonged skin contact may cause skin irritation.

Aquatic environment

Slightly water endangering.

Persistent, bioaccumulative and toxic substances (PBT-substances): None.

Very persistent and very bioaccumulative substances (vPvB-substances): None.

SECTION 3: Composition/information on ingredients

3.1. **Substances:** Not applicable.

Manufacturer, supplier: Balconette, Unit 6 Systems House, Eastbourne Road, Blindley Heath, RH76JP Lingfield,

Surrey, Great Britain, Telephone: 01342-410411 Date: 2022-01-31 Former date:

3.2 Mixtures:

Dangerous Ingredients

CAS - No.	Index - No.	EC - No.	Chemical name / REACH Registration number	m% - range	pictogram(e)	H - phrases
64-17-5	603-002-00-5	200-578-6	ethanol / 01-2119457610-43	85 < C < 90 %	GHS02 GHS07	H225 H319

H225 = Flam. Liq. 2, H319 = Eye Irrit. 2

SECTION 4: First aid measures

4.1 Description of first aid measures:

General advice:

Show this safety data sheet to the doctor in attendance.

Inhalation:

Move to fresh air. If symptoms persist, call a physician.

Skin contact:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation persists, call a physician.

Eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth out and drink plenty of water. In case of swallowing larger quantities consult physician immediately.

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

Not known.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use dry chemical, carbon dioxide, water spray or "alcohol" foam.

Unsuitable extinguishing media: None.

5.2 Special hazards arising from the substance or mixture:

In the event of fire the following can be released: Carbon oxides.

5.3 **Advice for firefighters:** Water mist may be used to cool closed containers.

Special protective equipment for firefighters:

Special protective equipment for firefighters:

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Use personal protective equipment. Remove all sources of ignition. Emergency procedures such as the need to evacuate the danger area or to consult an expert.

6.1.2 For emergency responders:

Use personal protective equipment. Inform the untrained personnel that the precautions listed in the subsection 6.1.1 are complied with.

6.2 **Environmental precautions:**

Do not allow to enter surface water or sewage system. Inform responsible authorities after accidental conduction of larger quantities. Soak up with inert absorbent material (e.g. sand, silica gel, universal binder). Shovel into suitable container for disposal.

- 6.3 Methods and material for containment and cleaning up:
- 6.3.1. Methods and material for containment:

Soak up with inert absorbent material (e.g. sand, silica gel, universal binder). Shovel into suitable container for disposal. After cleaning, flush away traces with water.

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6.3.2 Methods and material for cleaning up:

After cleaning, flush away traces with water.

6.3.3 Inappropriate containment or clean-up techniques:

None.

6.4 Reference to other sections:

See section 8 / 13.

SECTION 7: Handling and storage

7.1 **Precautions for safe handling:**

7.1.1 Recommendations shall be specified to:

Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Ensure adequate ventilation, especially in confined areas. Vapours are heavier than air and may spread along floors.

7.1.2 Advice on general occupational hygiene shall be provided:

Avoid contact with eyes. Do not breathe vapors or spray mist. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed. Keep cool in a well-ventilated place. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Do not store together with strong oxidizing agents.

Precautions in Case of Fire and Explosion:

Normal measures for preventive fire protection. Remove all sources of ignition.

7.3 Specific end use(s):

Coating for glass / ceramics.

SECTION 8: Exposure controls/personal protection

3.1	CAS / Material	Limit Value according to TRGS 900/ EC Guidline 2000/39:	
	64-17-5 / ethanol	United Kingdom: 8 hours: 1000 ppm, 1920 mg/m ³ United Kingdom 0,25 hours: no values A risk of fetal damage does not need to be feared if the occupational exposure limits are adhered to. EU: no own values	

Reference: Gestis Data base - Data on chemical media

DNEL-Values: ethanol	
Excessive exposures - systemic properties:	Inhalation: 950 mg / m ³
PNEC - Wert: ethanol	9,82 mg/l

8.2 **Exposure controls:**

Ingredient named in section 8.1.

8.2.1 Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas. Vapours are heavier than air and may spread along floors.

8.2.2 Personal Protective Equipment

Respiratory Protection: No personal respiratory protective equipment normally required.

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Hand Protection:

Excessive exposure: Protective gloves (butyl rubber) according to EN 374.

Break through time: 240 Min. Glove thickness: 0,5 mm.

Short time exposure: Protective gloves according to EN 374. (butyl rubber).

Break through time: 30 Min. Glove thickness: 0,4 mm.

Eye Protection: Goggles according to EN 166. Solvent-resistant protective clothing.

Further Information: Choose body protection according to the amount and concentration of the dangerous

substance at the work place.

Thermal hazards: None.

8.2.3 **Environmental exposure controls:** None.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: liquid

Colour:colorless to light yellowOdour:smell of ethanolOdour threshold:no data available

Safety Relevant Data

pH:, (undiluted): 5,2

Boiling point/range: (°C): ~78 (ethanol)

Melting point/range: (°C): ~-117 (ethanol)

Flash point ($^{\circ}$ C): ~ 16

Flammability: Highly flammable liquid and vapour.

Ignition temperature ($^{\circ}$ C): > 400 Lower flammability or explosive limits: \sim 3,5 (ethanol). Upper flammability or explosive limits: \sim 15 (ethanol)

Vapour pressure: 57 mbar at 20 °C (ethanol)

Relative density (g/cm³) 0,82
Water solubility Soluble
Fat solubility Yes.

Partition coefficient (n-octanol/water): no data available
Auto-ignition temperature °C: Not applicable.
Viscosity no data available
Oxidising properties: Not applicable.
Explosive properties: Not applicable.

Solvent (g/100 g): ~ 90 VOC (g / kg): ~ 900

9.2 **Other information:**

Thermal decomposition (°C): > 400 Vapour density (Air = 1): > 1

Evaporation rate: Data source: Safety data sheet of the supplier for ethanol

ethanol: 8,0 (ether = 1) (DIN 53170) ethanol: 1,7 (nBuAc = 1) (ASTM D 3539)

SECTION 10: Stability and reactivity

10.1 **Reactivity:**

No hazards resulting from the material as supplied.

10.2 **Chemical stability:**

Stable at normal conditions

10.3 **Possibility of hazardous reactions:**

Reactions with strong oxidizing agents, alkali and alkaline earth metals.

10.4 Conditions to avoid:

None.

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10.5 **Incompatible materials:**

None.

10.6 **Hazardous decomposition**:

No dangerous decomposition products when properly handled.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.1.1 Mixtures

Acute toxicity

LC50/inhalation/ rat/ppm / 10 h: no data available LD50/oral/rat /mg/kg: no data available LD50/oral/human/mg/kg: no data available LD50/dermal/rat(g/kg):= no data available

Irritation Causes serious eye irritation.

Corrosivity None.

Sensitization: Not sensitizing.
Carcinogenicity: Not applicable.
Mutagenicity: Not applicable.

Toxicity for reproduction None.

11.1.2 Substances

Acute toxicity ethanol:

LC50/inhalation/ rat/ mg/l/4 h

LD50/oral/rat /mg/kg: 7060

LDL0/oral/human/mg/kg: 1400

LD50/dermal/rab (g/kg): > 20

Skin corrosion/irritation None.

Serious eye damage/irritation None.

Respiratory or skin sensitisation
Not sensitizing.

Germ cell mutagenicity

Cat. 5 (DFG – classification, Germany)

Carcinogenicity

Cat. 5 (DFG – classification, Germany)

Reproductive toxicity A risk of fetal damage does not need to be feared if the occupational

exposure limits are adhered to

STOT-single exposure None. STOT-repeated exposure None. Aspiration hazard None.

SECTION 12: Ecological information

12.1 **Toxicity:**

Slightly water endangering.

Reference: Gestis Data base - Data on chemical media

ethanol	
LC50 fish (96 hours)	
Median value	11000 mg/l
LC50 crustaceans (48 hours)	
Median value	9820 mg/l

12.2 Persistence and degradability:

The product is biodegradable.

Toxicity to fish:

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12.3 **Bioaccumulative potential:**

Does not bioaccumulate.

12.4 **Mobility in soil:**

Does not bioaccumulate.

12.5 Results of PBT and vPvB assessment:

Persistent, bioaccumulative and toxic substances (PBT-substances): None. Very persistent and very bioaccumulative substances (vPvB-substances): None.

12.6 Other adverse effects

No data is available on the product itself.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Methods of waste treatment of both the substance or mixture and any contaminated packaging

Suggestions: Dispose of contents / container to a recognized disposal company.

Waste disposal number: 07 07 99 - wastes from the MFSU of fine chemicals and chemicals , n.o.s., wastes n.o.s. (Decision 2014/955/EU)

SECTION 14: Transport information

Transportation according to ADR/GGVS, IMDG/GGVSee and IATA-DGR/ICAO-TI:

- 14.1 **UN-Nummer:** 1170
- 14.2 **UN proper shipping name:** UN 1170 Ethanol-Solution
- 14.3 **Risk Label:** 3

14.4

Classification Code: F1 Packaging group: II

Transport category (Tunnel restriction code): 2(D/E)

14.5 Environmental hazards:

Marine pollutant: not applicable.

14.6 Special precautions for user:

None

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

None.

SECTION 15: Regulatory information

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

Compliance with occupational safety

Regulation (EC) 1005/2009: not applicable.

Regulation (EC) 850/2004: not applicable..

Regulation (EC) 649/2012: not applicable..

Directive 96/82/EC (Seveso): applicable.

Regulation (EC) No 648/2004 on detergents: not applicable

15.2 **Chemical safety assessment:** No data available.

SECTION 16: Other information

H - Phrases:

See Section 2.1.

Abbreviations:

DNEL-Werte (Derived No-Effect Levels)

AF = Sicherheitsfaktor (Assessment Factor)

DNEL-Werte (Derived No-Effect Levels)

DFG = Deutsche Forschungsgemeinschaft (Germany)

AGS = Ausschuss für Gefahrstoffe (Germany)

Regulation (EC) 1005/2009: Substances that deplete the ozone layer

Regulation (EC) 850/2004: Persistent organic pollutants

Regulation (EC) 649/2012: Export and import of dangerous chemicals

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Further information to work out the Data sheet: Data of the producer. Classification: In accordance with Regulation (EC) No 1272/2008, Table 2.6.1 and Table 3.3. regulations. The statements in this Material Safety Data Sheet were made to the best of our knowledge and	-
They are given for information only. They do not constitute a contractual guarantee of a product neither be altered nor transferred to other products. etc005k2_060521	