

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Geogard™ 221

Version	1.0 / CS
Date of revision	15.12.2016
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Substance name : Geogard™ 221

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

Use of the substance or mixture : Preservative (stabilizer) for cosmetic products

1.3 Detailed data on the supplier of the safety data sheet

Business	Ekokoza	S.r.o.
	Fryšovice 297, 73945, Fryšovice	
	ID: 07508247, eshop@ekokoza.cz	
E-mail address		
Responsible/issuing person		

1.4 Telephone number for emergency situations

Emergency telephone number: +420224919293 daily) . +420224915402 (24 hour phone/
Toxicological information center, Na Bojišti 1, 128 08 Prague 2)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

REGULATION (EC) No. 1272/2008

Acute toxicity; Category 4; Orally

Acute toxicity; Category 4; Inhalation

67/548/EHS / 1999/45/ES

Harmful by inhalation and if swallowed.

H302 Harmful if swallowed.

H332 Harmful by inhalation.

2.2 Marking elements

Marking according to EC directives

REGULATION (EC) No. 1272/2008

Pictogram



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With a signal word : Warning

Standard hazard statements

H302 : Harmful if swallowed.

H332 : Harmful by inhalation.

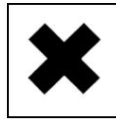
Instructions for safe handling

P261 : Avoid breathing mist/vapour/aerosols.

P301 + P312 : IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

67/548/EHS / 1999/45/ES

Symbol(y)



Unhealthy



R-phrases

R20/22 : Harmful by inhalation and if swallowed.

S-phrases

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.

2.3 Other hazards

General instructions : No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Substances / Mixtures : Mixture

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Dangerous components**3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione**

No. TIME	No. EC / Registration number	Classification	Concentration
520-45-6 (771-03-9)	208-293-9	Acute Tox.; 4; H302 Xn; R22	1 - 10 %

Benzyl alcohol

100-51-6	202-859-9 / 01- 2119492630-38-XXXX	Acute Tox.; 4; H302 Acute Tox.; 4; H332 Xn? R20/22	50 - 90 %
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For the full text of the H-statements given in this section, see section 16.

The full wording of the R phrases mentioned in this section is given in section 16.

SECTION 4: First aid measures**4.1 Description of first aid**

Inhalation	: Remove victim to fresh air. If breathing is irregular or stops, perform artificial respiration. In case of persistent problems, call a doctor.
Skin contact	: In case of skin contact, wash immediately with plenty of water and soap. Consult a doctor.
Eye contact	: In case of eye contact, rinse immediately with plenty of water and consult a doctor. Call a doctor immediately.
Ingestion	: Call a doctor immediately. Rinse your mouth and drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of immediate medical attention and special treatment

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Liability

Suitable extinguishing agents : Water mist, Dry powder, Foam

5.2 Special hazards arising from the substance or mixture

Specific firefighting hazards : May release toxic gas during heating or fire.

5.3 Instructions for firefighters

Special protective equipment for firefighters : Use self-contained breathing apparatus in case of fire.
More information : Cool closed containers by spraying water.

SECTION 6: Accidental release measures

6.1 Personal protection measures, protective equipment and emergency procedures

Measures for the protection of persons : Wear a breathing apparatus during manipulations where exposure to product vapors may occur.

6.2 Environmental protection measures

Environmental protection measures : Take preventive measures to prevent the product from entering the sewage system.

6.3 Methods and material for containment and cleaning up

Cleaning methods : Do not allow to enter surface waters or sewers. Sweep up, vacuum up spilled material and transfer to a suitable container for disposal.

6.4 Reference to Other Sections

Additional instructions : For personal protection see section 8.

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SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Instructions for safe handling	: Avoid contact with skin and eyes. Sufficient air exchange and/or exhaust ventilation must be ensured in the working areas.
Instructions for protection against fire and explosion	: Take precautions against static electricity discharge.

7.2 Conditions for safe storage of substances and mixtures, including incompatible substances and mixtures

Requirements for storage areas and containers	: To preserve product quality, do not store in heat or direct sunlight. Keep the package tightly closed. Store in a dry, cool and well-ventilated place.
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7.3 Specific end / specific end uses

Specific (specific) uses	: No information available.
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SECTION 8: Exposure controls / personal protective equipment**8.1 Control parameters**

It does not contain any substances with workplace exposure limit values.

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

Benzyl alcohol : Area of use: Consumers Routes of exposure:

Oral Possible health effects: Short-term exposure, Acute - systemic effects

Value: 20 mg/kg

Area of use:

Consumers Routes of exposure: Oral Possible

health effects: Long-term - systemic effects Value: 4 mg/kg

Area of use:

Consumers Routes of exposure: Inhalation

Possible health effects: Short-term exposure, Systemic effects Value: 27 mg/m3

Area of use: Consumers

Routes of exposure:

Inhalation Possible Health effects: Long-term - systemic effects Value: 5.4 mg/m3

Area of use: Workers

Exposure routes: Inhalation

Possible health effects: Short-term exposure, Systemic effects Value: 110 mg/m3

Area of use: Workers

Exposure routes: Inhalation

Possible health effects: Long-term - systemic effects Value: 22 mg/m3

Area of use: Workers Routes of exposure: Dermal

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Possible health effects: Short-term exposure, Systemic effects

Value: 40 mg/kg

Field of application: Workers

Routes of exposure: Dermal

Possible health effects: Long-term - systemic effects

Value: 8 mg/kg

Estimated no-adverse-effect concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Benzyl alcohol	: Soil
	Value: 0.456 mg/kg
	Sewage treatment plant
	Value: 39 mg/l
	Marine sediment
	Value: 0.527 mg/kg
	Seawater
	Value: 0.1 mg/l
	Freshwater sediment
	Value: 5.27 mg/kg
	Sweet water
	Value: 1 mg/l

8.2 Limiting Exposure**Personal protective equipment**

Respiratory protection	: In the event of vapors, use a breathing mask with a suitable filter. Breathing mask with vapor filter (EN 141) Filter breathing apparatus with ABEK filter.
Hand protection	: Suitable material : Nitrile rubber Penetration time: > 480 min Pay attention to the manufacturer's information on permeability and penetration time and specific workplace conditions (mechanical stress, contact time).
Eye protection	: Well-sealing safety glasses
Skin and body protection	: Choose personal protective equipment according to the amount and concentration of the hazardous substance in the workplace. There is no need to use special protective equipment.
Hygiene measures	: Before the work break and immediately after the end of the manipulation with wash your hands with the product. Avoid splashing on skin and clothing and getting into eyes.

Limiting environmental exposure

General instructions	: Take preventive measures to prevent the product from entering the sewage system.
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SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

State	: liquid
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Color	: yellow
pH	: data not given
Melting point/range	: data not given
Boiling point/boiling range	: data not given
Point of ignition	: > 96 °C
Solubility in water	: slightly soluble substance

9.2 Additional Information

dates not given

SECTION 10: Stability and reactivity

10.1 Reactive

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Stable under normal conditions.

10.4 Conditions to Avoid

dates not given

10.5 Incompatible Materials

None.

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x), Carbon oxides

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

The following toxicological data refer to:

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (ÿ. CAS: 520-45-6)

Information on toxicological effects

Acute oral toxicity (LD50)	: 1 480 mg/kg Species: Rat Method: DOT
Skin irritation	: non-irritating Species: Rabbit Exposure time: 4 h Method: DOT
Sensitization	: non-sensitizing Species: Mouse Local Lymph Node Assay Method: OECD Test Guideline 429
Genotoxicity in vitro	: negative Ames test, Salmonella typhimurium

Benzyl alcohol (CAS No.: 100-51-6)

Information on toxicological effects

Acute oral toxicity (LD50)	: 1 610 mg/kg Species: Rat Literary reference
Acute inhalation toxicity (LC50)	: > 4,178 mg/l Species: Rat Exposure time: 4 h Literary reference
Acute dermal toxicity (LD50)	: 2 000 mg/kg Species: Rabbit Literary reference
Skin irritation	: non-irritating Species: Rabbit Exposure time: 4 h Method: OECD Test Guideline 404 Literary reference
Eye irritation	: slightly irritating Species: Rabbit Method: OECD Test Guideline 405 Literary reference

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Sensitization	: non-sensitizing Species: Guinea pig Magnusson & Kligman Literary reference
Repeated dose toxicity : NOEL: 400 mg/kg	Method of administration: Orally Exposure time: 90.0 d Species: Rat Literary reference
Genotoxicity in vitro	: negative Ames test Literary reference borderline Gene mutations, mouse lymphoma cells Literary reference positive Chromosomal aberration test in vitro Literary reference
Genotoxicity in vivo	: negative In vivo nuclear test Execution method: ip Exposure time: 24 h Species: Mouse Literary reference
Additional instructions	: Skin contact may cause sensitization in sensitive individuals. Absorption through the skin may occur High vapor concentration may cause unconsciousness.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	: data not given
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12.2 Persistence and Deployability

Biodegradability	: data not given
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12.3 Bioaccumulative potential

Bioaccumulation	: data not given
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12.4 Mobility in soil

Behavior and fate in the environment : data not given

12.5 Results of PBT and vPvB assessment

Evaluation : The mixture does not contain any substances considered to be persistent, bioaccumulative nor toxic (PBT).
The mixture does not contain any substances considered to be highly persistent or highly bioaccumulative (vPvB).

12.6 Other Adverse Effects

Additional instructions : data not given

The following ecotoxicological data refer to:

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (ÿ. CAS: 520-45-6)

Toxicity

Toxicity to fish (NOEC) : 218 - 415 mg/l
Druh: Cyprinus carpio (kapr)
Acute toxicity
Exposure time: 72 h

Persistence and degradability

Biodegradability : OECD Coupled Units: 99 %
easily biodegradable
Method: OECD Test Guideline 303 A

Biodegradability test: 96%
easily biodegradable
Testing period: 14 d
Method: OECD Test Guideline 302 B

Cultivation method (sealed container test): 81%
The substance is easily biodegradable.
Testing period: 30 d
Method: OECD Test Guideline 301D

Bioaccumulative potential

Bioaccumulation : data not given

Mobility in soil

Behavior and fate in the environment : data not given

Other adverse effects

Additional instructions : There is no information available about the product.

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Benzyl alcohol (CAS No.: 100-51-6)

Toxicity

Toxicity to fish (LC50)	: 646 mg/l Species: <i>Leuciscus idus</i> (Jesen golden) Acute toxicity Exposure time: 48 h Method: DIN 38412 Part 15 Literary reference
Toxicity to fish (LC50)	460 mg/l Druh: <i>Pimephales promelas</i> (stýevle) Acute toxicity Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates (EC50)	: 400 mg/l Species: <i>Daphnia magna</i> Immobilize Exposure time: 24 h Method: DIN 38412 L11 Literary reference
Toxicity to algae (IC50)	: 770 mg/l Species: <i>Pseudokirchneriella subcapitata</i> Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to algae (NOEC)	: 310 mg/l Species: <i>Pseudokirchneriella subcapitata</i> Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to bacteria (EC50)	: 658 mg/l Species: <i>Pseudomonas putida</i> (Bacteria) Exposure time: 16 h Literary reference
Toxicity to bacteria (EC50)	: 71 mg/l Druh: <i>Photobacterium phosphoreum</i> (Bakterie) Exposure time: 30 min Literary reference
Chronic toxicity to Daphnia (NOEC)	: 51 mg/l Species: <i>Daphnia magna</i> Exposure time: 21 d Method: OECD Test Guideline 211

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Persistence and degradability

Biodegradability : Cultivation method (sealed container test): > 90%
 The substance is easily biodegradable.
 Testing period: 30 d
 Method: OECD Test Guideline 301D
 Literary reference

Bioaccumulative potential

Bioaccumulation : Does not accumulate in biological tissues.
 Bioconcentration factor (BCF): 4
 Literary reference

Mobility in soil

Behavior and fate in the environment : Adsorption/soil
 Literary reference

SECTION 13: Disposal considerations**13.1 Waste management methods**

Product : Dispose in accordance with local regulations.
 Contact a waste disposal service.

Contaminated packaging : Dispose of as unused product.

SECTION 14: Transport information

THERE IT IS

Not dangerous goods

14.1 UN number : Does not apply
14.2 UN proper shipping name 14.3 Transport hazard class(es) : Does not apply
 : Does not apply

14.4 Packing group : Not applicable**14.5 Environmental hazard** : no**IMDG**

Not dangerous goods

14.1 UN number : Does not apply
14.2 UN proper shipping name 14.3 Transport hazard class(es) : Does not apply
 : Does not apply

14.4 Packing group : Not applicable**14.5 Environmental hazards** : Marine pollutant: no

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ADR : Not dangerous goods

14.1 UN number : Does not apply

14.2 UN proper shipping name 14.3 : Does not apply

Transport hazard class(es) : Does not apply

14.4 Packing group : Not applicable

14.5 Environmental hazard : no

RID : Not dangerous goods

14.1 UN number : Does not apply

14.2 UN proper shipping name 14.3 : Does not apply

Transport hazard class(es) : Does not apply

14.4 Packing group : Not applicable

14.5 Environmental hazard : no

DOT : Not dangerous goods

14.1 UN number : Does not apply

14.2 UN proper shipping name 14.3 : Does not apply

Transport hazard class(es) : Does not apply

14.4 Packing group : Not applicable

14.5 Environmental hazard : no

TDG : Not dangerous goods

14.1 UN number : Does not apply

14.2 UN proper shipping name 14.3 : Does not apply

Transport hazard class(es) : Does not apply

14.4 Packing group : Not applicable

14.5 Environmental hazard : no

14.6 Special security measures for users : none

14.7 Bulk transport according to Annex II of MARPOL 73/78 and the IBC regulation : Does not apply

SECTION 15: Regulatory Information

15.1 Regulations relating to safety, health and the environment/ specific legal regulations relating to substance or mixture

This safety data sheet meets the requirements of Regulation (EC) No. 1907/2006.

National legislation

Water pollution class (Germany) : WGK 1: substance slightly hazardous to water

This product is regulated by the FDA when used in cosmetics.

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15.2 Chemical safety assessment

is not required

SECTION 16: Further information

Full text of the H-statement

H302	Harmful if swallowed.
H332	Harmful by inhalation.

Full text of R-phrases

R20/22	Harmful by inhalation and if swallowed.
R22	Harmful if swallowed.

Changes compared to the previous version are marked in the margin. This version replaces all previous versions.

The information in this safety data sheet is to the best of our knowledge, information and belief at the time of its issuance. The information provided is intended only as a guide for the safe handling, use, storage, processing, transportation, disposal and release of the product and should not be considered as a warranty or quality specification. The information applies only to the specific material named and may become invalid if used in combination with any other materials or in any processes unless specifically stated in the text.