

SAFETY DATA SHEET

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

- 1.1 Product identifier**
Trade name: **SYSTEM OUTEK**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Relevant identified uses: dispersion paint.
Uses advised against: not determined.
- 1.3 Details of the supplier of the safety data sheet**
Supplier: NANOTEK.EU LTD
Address: Sinches st. 10 – 1000 Sofia – Bulgaria
Telephone number: + 359 (2) 4910794
E-mail address for a competent person responsible for SDS: nanotekeuropa@gmail.com
- 1.4 Emergency telephone number**
112

Section 2: Hazards identification

- 2.1 Classification of the substance or mixture**
Aquatic Chronic 3 H412
Harmful to aquatic life with long lasting effects.
- 2.2 Label elements***
Hazard pictograms and signal words
None.
Substances which influenced product classification
None.
Hazard statements
H412 Harmful to aquatic life with long lasting effects.
Precautionary statements
P102 Keep out of reach of children.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing.
P501 Dispose of contents/container to properly labeled waste containers in accordance with national regulations.
- Additional information**
EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

* Provisions of the Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 do not apply to cosmetics. Labelling of unit packaging should include information in accordance with article 19 of Regulation (EC) No 1223/2009 of the European Parliament and with Council of 30 November 2009 on cosmetic products and Council Directive 75/324/EEC of 20 May 1975 (as amended).

2.3 Other hazards

The substances contained in the product do not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

CAS number: 13463-67-7 EC number: 236-675-5 Index number: - Registration number: 01-2119489379-17-XXXX	<u>titanium dioxide</u> substance is not classified as hazardous	< 15 %
CAS number: 57-55-6 EC number: 200-338-0 Index number: - Registration number: 01-2119456809-23-XXXX	<u>propane-1,2-diol</u> substance is not classified as hazardous	< 2 %
CAS number: 1314-13-2 EC number: 215-222-5 Index number: 030-013-00-7 Registration number: 01-2119463881-32-XXXX	<u>zinc oxide</u> Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	< 0,12 %
CAS number: 2634-33-5 EC number: 220-120-9 Index number: 613-088-00-6 Registration number: 01-2120761540-60-XXXX	<u>1,2-benzisothiazol-3(2H)-one</u> Acute Tox. 4 H302, Skin Irrit. 2 H315, Skin Sens. 1 H317, Eye Dam. 1 H318, Acute Tox. 2 H330, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 2 H411 specific concentration limits: Skin Sens. 1 H317: C ≥ 0,05 %	≤ 0,03 %
CAS number: 13463-41-7 EC number: 236-671-3 Index number: - Registration number: -	<u>pyrithione zinc</u> Acute Tox. 3 H301, Eye Dam. 1 H318, Acute Tox. 2 H330, Aquatic Acute 1 H400 (M=100), Aquatic Chronic 1 H410 (M=10)	< 0,04 %
CAS number: 886-50-0 EC number: 212-950-5 Index number: - Registration number: -	<u>terbutryn</u> Acute Tox. 4 H302, Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=100), Aquatic Chronic 1 H410 (M=100)	< 0,007 %

Full text of each relevant H phrase is given in section 16 of SDS.

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: take off contaminated clothes and wash it before next use. Wash contaminated skin thoroughly with water and soap. Seek medical advice if disturbing symptoms appear.

Eye contact: wash the contaminated eye with plenty of water for few minutes. Protect the non-irritated eye, remove contact lenses. Consult ophthalmologist if disturbing symptoms appear.

Ingestion: do not induce vomiting. Rinse mouth with water and drink small quantities of water. Never give anything by mouth to an unconscious person. Consult a doctor, show the label or safety data sheet.

Inhalation: remove the victim to fresh air, keep warm and calm. Consult a doctor if disturbing symptoms appear.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: possible redness, burning sensation, irritation, allergic reaction.

Eye contact: possible redness, tearing, pain, blurred vision, irritation.

Ingestion: possible stomach ache, vomiting, nausea.

Inhalation: no side effects have been found

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: water spray, carbon dioxide and dry extinguishing media. Adjust the extinguishing media to the materials gathered in the vicinity.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

5.2 Special hazards arising from the substance or mixture

During combustion harmful gases consisting of carbon oxides, nitrogen oxides and other unidentified products of thermal decomposition may be produced. Do not inhale combustion products, it may cause health risk.

5.3 Advice for firefighters

Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Do not let extinguishing media reach drainage system, ground and surface water. Highly flammable liquid and vapour. In case of fire, cool endangered containers with water spray from a safe distance. Product vapors are heavier than air may spread along the floors towards distant ignition sources and may be pose a risk of a receding flame.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. In case of a large breakdown, isolate the exposed area. Ensure that only the trained personnel removes the effects of the accident. Wear personal protective equipment. Avoid eyes, skin and clothes contamination. Do not breathe vapours. Ensure adequate ventilation.

6.2 Environmental precautions

Do not empty into drains, surface or ground water. In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Place damaged packaging in replacement packaging. Leaks soak up with incombustible liquid-binding material (e.g. sand, earth, silica, vermiculite). Collect spilled material in and place in appropriate containers. Treat collected material as waste. Clean well ventilate the contaminated place. Do not use sparking tools.

6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Personal protection equipment – section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke while working. Avoid contact with eyes. Ensure adequate ventilation. Before break and after work wash hands carefully. Remove all ignition sources, do not smoke. Do not use sparking tools. Ground the equipment.

7.2 Conditions for safe storage, including any incompatibilities

Store only in tightly closed containers in a cool, dry and well-ventilated area. Store the resealed containers in an upright position to prevent leaking. Keep away from food, beverages or feed for animals. Keep away from incompatible materials (see subsection 10.5). Protect from light, direct sunlight, cold and moisture. When pouring the product, follow the manufacturer's guidelines regarding the process temperature. Do not store near sources of heat and ignition. Store at temperatures 5-25 °C.

7.3 Specific end use(s)

No information about other uses than those mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Please check any national occupational exposure limit values in your country.

Recommended control procedures

Procedures concerning the control over the dangerous components concentrations in the air and control over the air quality in the workplace - if they are available and Justified for the position - in Accordance with the European Standards, with the conditions within the exposure place and a proper test methodology adapted to the working conditions.

DNEL value for propane-1,2-diol [CAS 57-55-6]

workers				
Exposure route	Acute, systemic	Acute, lokal	Long-term, systemic	Long-term, lokal
inhalation	—	—	168 mg/m ³	10 mg/m ³
population				
Exposure route	Acute, systemic	Acute, lokal	Long-term, systemic	Long-term, lokal
inhalation	—	—	50 mg/m ³	10 mg/m ³

PNEC values for components

titanium dioxide [CAS: 13463-67-7]

fresh water	0,127 mg/l
marine water	≥ 1 mg/l
fresh water sediment	≥ 1000 mg/kg
marine water sediment	≥ 100 mg/kg
soil	100 mg/kg
sewage treatment plant	≥ 100 mg/l

propane-1,2-diol [CAS 57-55-6]

fresh water	260 mg/l
marine water	26 mg/l
fresh water sediment	572 mg/kg
marine water sediment	57,2 mg/kg
soil	50 mg/kg
sewage treatment plant	2000 mg/l
intermittent release	186 mg/l

8.2 Exposure controls

Observe good occupational hygiene and safety practices. Ensure adequate general and/or local ventilation in the workplace. Do not eat, drink or smoke when using the product. Wash hands thoroughly before breaks and after work. Avoid contamination of skin, eyes and clothing. Immediately take off contaminated clothes and wash it before next use.

Hand protection

Use protective gloves resistant to chemicals. Material for gloves: latex. In case of a short contact, use protective gloves with effectiveness level ≥ 2 (breakthrough time > 30 min.). In case of a prolonged contact, use protective gloves with effectiveness level = 6 (breakthrough time > 480 min.). Wear protective clothing.

When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.

Skin protection

Depending on the task being performed, use protective clothing appropriate to the potential hazard. Wash contaminated clothes before next use.

Eye protection

Wear eye protection if there is a risk of eye contamination.

Respiratory protection

Not required under normal conditions of work and adequate ventilation. In case of high concentration of vapours in the air or a breakdown, use respiratory protection.

Thermal hazards

Not applicable.

Personal protective equipment must meet requirements of Regulation 2016/425/EU. Employer is obliged to ensure equipment adequate to activities carried out, with quality demands, cleaning and maintenance.

Environmental exposure controls

Do not allow the large quantity of mixture to contaminate ground water, sewage systems, sewage and soil. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of the environmental law.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	white
Odour	characteristic
Melting point/freezing point:	0 °C (aqua)
Boiling point or initial boiling point and boiling range :	> 93 °C
Flammability:	not determined
Lower and upper explosion limit:	not determined
Flash point:	100 °C (aqua)
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH:	slightly alkaline
Kinematic viscosity:	not determined
Solubility:	mixes with water
Partition coefficient n-octanol/water (log value):	not determined
Vapour pressure:	not determined
Density and/or relative density:	0,80-0,85 g/cm ³ (20°)
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2 Other information

No additional test results.

Section 10: Stability and reactivity

10.1 Reactivity

The product is not very eactive. See also subsections 10.3-10.5.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Hazardous reactions are not known.

10.4 Conditions to avoid

Avoid direct sunlight, sources of heat and ignition.

10.5 Incompatible materials

Strong oxidants.

10.6 Hazardous decomposition products

Not known.

Section 11: Toxicological information

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

Toxicity of components

propane-1,2-diol [CAS 57-55-6]

LD₅₀ (oral, rat) > 5000 mg/kg

LD₅₀ (skin, rabbit) > 2000 mg/kg

LC₅₀ (inhalation, rabbit) > 20 mg/l/4h

titanium dioxide [CAS: 13463-67-7]

LD₅₀ (oral, rat) > 5000 mg/kg

LC₅₀ (inhalation, rat) > 6,82 mg/l/4h

Toxicity of mixture

The acute toxicity estimate (ATEmix) for the classification of a substance in a mixture was determined using the appropriate conversion value from Table 3.1.2 in Annex I to CLP as amended.

ATE mix (oral) > 2000 mg/kg

ATE mix (inhalation) > 20 mg/l

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met. Product contains component that may produce an allergic reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

No data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No data.

11.2 Information on other hazards

Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

Other information

Not applicable.

Section 12: Ecological information

12.1 Toxicity

Toxicity of components

propane-1,2-diol [CAS 57-55-6]

LC50 (fish)	40613 mg/l/96h/ Oncorhynchus mykiss (OECD203)
ErC50 (algae)	19000 mg/l/96h/ Pseudokirchneriella subcapitata (OECD201)
LC50 (invertebrates)	18340 mg/l/48h/ Ceriodaphnia dubia (OECD 202)

titanium dioxide [CAS: 13463-67-7]

LC50 (fish)	> 1000 mg/l/96h/ Pimephales promelas
EC50 (algae)	61 mg/l/72h/ Pseudokirchneriella subcapitata
EC50 (invertebrates)	> 1000 mg/l/48h/ Daphnia magna

Toxicity of mixture

Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Data for components:

propane-1,2-diol [CAS 57-55-6] biodegradable in 72-100% (28 days).

Substance is easily biodegradable.

titanium dioxide [CAS: 13463-67-7]

Inorganic substances are not biodegradable

12.3 Bioaccumulative potential

Data for components:

propane-1,2-diol [CAS 57-55-6]

log Po/w: - 1,07 BCF: 0,09

Bioaccumulation is not expected.

titanium dioxide [CAS: 13463-67-7]

Bioaccumulation is not expected.

12.4 Mobility in soil

Mobility of components of the mixture depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms.

12.5 Results of PBT and vPvB assessment

Substances contained in the product are not assessed as PBT and vPvB in accordance with Annex XIII of the REACH Regulation.

12.6 Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

12.7 Other adverse effects

The mixture is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg, global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the mixture: do not empty into drains. Do not allow it to contaminate surface and ground water. Do not store on municipal landfills. Reuse or disposal of a waste product should be carried out in accordance with applicable regulations. Store residues in original containers. Do not mix with other waste. Waste code should be assigned in the place of its formation.

Disposal methods for used packing: empty containers should be reused/recycled/eliminated in accordance with the local legislation. Reuse reusable packaging after cleaning. Contaminated packaging should be treated in the same way as the product.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

Section 14: Transport information

14.1 UN number or ID number

None.

14.2 UN proper shipping name

None.

14.3 Transport hazard class(es)

None.

14.4 Packing group

None.

14.5 Environmental hazards

Mixture is not hazardous to the environment in accordance with the criteria in transport regulations.

14.6 Special precautions for user

None.

14.7 Maritime transport in bulk according to IMO instruments

None.

Additional information

None.

Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (as amended).

Commission Regulation (EU) No 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC as amended.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Commission Directive 2019/1831/EU of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

15.2 Chemical safety assessment

According to the REACH regulation, it is not necessary to carry out a chemical safety assessment for mixture.

Section 16: Other information

Full text of indicated H phrases mentioned in section 3

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
TWA	Time weighted Average
STEL	Short-Term Exposure Limit
Aquatic Chronic 1, 2, 3	Hazardous to the aquatic environment, chronic cat. 1, 2, 3
Aquatic Acute 1	Hazardous to the aquatic environment, acute cat. 1
Acute Tox. 2, 4	Acute toxicity cat. 2, 4
Skin Irrit. 2	Skin irritation cat. 2
Skin Sens. 1, 1B	Skin sensitization cat. 1, 1B
Eye Dam. 1	Serious eye damage cat. 1

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Key literature references and sources of data

The data sheet has been prepared on the basis of the safety data sheet provided by the supplier, literature data, online databases as well as our knowledge and experience, taking into account current legislation.

Procedures used for the mixture classification

Classification was based on the basis of the physicochemical data and hazardous substances calculation method under the guidance of Regulation 1272/2008/EC (CLP) as amended.



Нанотек еу ЕООД

ул Синчец 10
1000 София - България
ДДС 207468719
Телефон +359 (2) 4910794

Other data

Date of issue: 22.04.2024

Version: 1.0/EN/Nanotek

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.