On the basis of the Commission Regulation (EU) No 830/2015 of 28.05.2015

TRANS-MICHOR KUTNO

#### DISINFECTANT

Issue date: 23.03.2020 Update date: Version 1 Page/pages 1/11

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

#### 1.1 Product identifier

Trade name: **DISINFECTANT** 

Product registration number: 0610/TP/2020

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

Disinfectants and algaecides not intended for direct application to humans or animals. Liquid for washing and disinfection by spraying of hard-to-reach surfaces and places, machines, devices and household furnishing (door knobs, handrails, windows, WC seats etc.).

Uses advised against: any other than listed above

## 1.3 Information on supplier of the Safety Data Sheet

"TRANS-MICHOR" Sp. z O.O. Sp. Kom.

ul. Sklęczkowska 18

99-300 Kutno

phone: +48 601 385 234

e-mail: handlowy@transmichor.pl

# 1.4 Emergency phone number

112

+48 42 631 47 25 - National Toxicological Information Center in Łódź

#### **SECTION 2: Hazards Identification**

#### 2.1 Mixture classification

#### Classification based on Regulation 1272/2008

The mixture has been classified as hazardous.

Flam. Liq. 2

H225 - Highly flammable liquid and vapors, cat.2

Eye Irrit.2

H319 Eye irritant, cat.2

## 2.2 Label elements

Labeling based on Regulation 1272/2008

Signal word DANGER

**Pictograms** 





# Hazard statements

**H225** Highly flammable liquid and vapors, cat.2 **H319** Eye irritant

# Precautionary statements

P241 Use explosion-proof electric/ ventilation/

lighting equipment

On the basis of the Commission Regulation (EU) No 830/2015 of 28.05.2015

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**P280** Wear protective gloves/protective clothing/eye protection/face protection

Response

P305 + P351+P338 IF PRODUCT GETS INTO EYES: Rinse cautiously with water for several

minutes. Remove the contact lenses, if any, if they can be removed easily.

Keep rinsing.

P303+P361+P353 SKIN (or hair) CONTACT: Remove all contaminated clothing immediately.

Rinse skin under water jet/shower.

Storage

**P210** Store away from heat sources/ fire and sparking sources, hot surfaces.

Smoking prohibited

P233 Keep container tightly closed.

**P403 +P235** Store in a well-ventilated place. Store in a cool place.

**Disposal** 

**P501** Dispose of contents/container in accordance with local/national regulations.

Additional information: None

Contains: None

2.3 Other hazards

The product does not meet the PBT or vPvB classification criteria according to annex XIII to

regulation REACH

# **SECTION 3: Composition/ information on ingredients**

## 3.1 Substances

Not applicable

### 3.2 Mixture

Chemical characterization: mixture of substances.

Chemical characte	erization: mixture of substances	·		
Substance nam	ne Identifier	Classification 1272/2008		% weight
Ethanol Ethyl alcohol	Index 603-002-00-5 CAS 64-17-5 WE 200-578-6 REACH 01-2119457610-43	Flam.Liq. 2 Eye Irrit. 2	H225 H319	70-75
Methyl ethyl ketone	Index 606-002-00-3 CAS 78-93-3 WE 201-159-0 REACH	Flam. Liq. 2 Eye irrit.2 STOT SE 3	H225 H319 H336	<1
Isopropyl alcohol	Index 603-117-00-0 CAS 67-63-0 WE 200-661-7	Flam. Liq. 2 Eye irrit.2 STOT SE 3	H225 H319 H336	<1

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REACH 01-2119457558-25

Denathonium benzoate

(bitrex)

Index ------CAS 3734-33-6 WE 223-095-2 REACH -----

Acute Tox. 4 Acute Tox. 4 Aquatic Chronic 3 H302 H332 <0.1

H332 H412

Full text of H phrases and acronyms of symbols, hazard classes and category codes can be found in section 16 of the Safety Data Sheet.

#### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

#### If inhaled:

Remove victim to fresh air. Keep them warm and at rest, loosen tight clothing items.

If necessary - apply artificial respiration or oxygen - preferably by a trained person.

Seek medical attention.

## If swallowed:

Due to contamination of ethanol used for industrial purpose, in any case make victim drink a large quantity of water, do not induce vomiting, in case of serious poisoning, bring the victim to hospital for observation and potential treatment.

# Contact with eyes:

Remove contact lenses. Rinse eyes with a large quantity of warm water for 15-20 minutes, holding eyelids apart, remove contact lenses.

Seek advice of ophthalmologist in case of irritation.

#### Skin contact:

In case of skin contact, remove soaked clothing and shoes, rinse water with large quantities of water If irritation persists, consult a dermatologist.

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

The product may cause irritation of respiratory tract, skin irritation, serious eye damage, drowsiness and dizziness.

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

If the patient is unconscious, place them in recovery position, keep them calm and warm, control breathing and heart rate. Never induce vomiting or administer anything orally to a person, who is unconscious or dizzy. Show the Safety Data Sheet to medical personnel providing assistance.

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Appropriate extinguishing media:

Carbon dioxide CO<sub>2</sub>, powder extinguishers, fire fighting foam resistant to alcohol. Water spray jet or water mist.

## Inappropriate extinguishing media:

Do not use direct water streams on the surface of burning mixture.

#### 5.2 Special hazards arising from the mixture

A highly flammable liquid, sensitive to electrostatic discharge. Vapors heavier than air disperse near the ground level, accumulate in lower parts of confined spaces and below the ground level.

## **Explosion hazards.**

Under favorable conditions of temperature and humidity, explosive mixtures with air are generated. Containers with mixture exposed to flames or high temperatures may explode.

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## 5.3 Advice for firefighters

Use standard methods of extinguishing chemical fires.

Containers exposed to high temperatures are to be cooled with water and, if possible, remove from area exposed to hazard.

Apply water spray jet to vapors of the product.

#### Firefighter protective equipment:

Follow the procedures applicable to extinguishing fires of chemicals. Prevent extinguishing media and sewage after the fire extinguishing action from escaping to drains and waterways.

Clothing resistant to high temperatures.

Self-contained breathing apparatus with independent air circulation.

Use explosimeters.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection measures to protect the respiratory tract from vapors/ aerosols of the product. Avoid direct contact with the product being released. Avoid inhaling vapors. Inform the neighbourhood about the emergency, keep all persons not involved in the emergency action away from the hazardous area.

Remove the potential ignition sources. Do not smoke. Do not use sparking tools.

Place proper signs and close the hazard zone.

Ensure proper ventilation. Remove vapors with water mist.

Call the Fire Service if necessary.

Follow the internal fire protection regulations.

Persons providing assistance should have protective clothing, protective gloves made of coated material resistant to organic solvents,

protective goggles and respiratory tract protection as necessary.

#### 6.2 Environmental precautions

If possible and safe, eliminate or limit release of the product.

Collect the released mixture as quickly as possible. Secure drains.

Prevent environmental pollution.

In the event of a serious contamination of a waterway, sewage system or soil, notify relevant administrative and control authorities, as well as rescue services.

# 6.3 Methods and materials for containment and cleaning up

In the case of unsealing of container or spilling of product, secure the damaged packaging. Ventilate the hazard area and avoid inhaling vapors.

Absorb with liquid-binding material (sand, diatomite, vermiculite, silica gel).

Place in a replacement container and mark as designated for disposal.

Clean the decontaminated area with a large quantity of water with detergent.

If the mixture is released to surface waters, warn the users.

#### 6.4 Reference to other sections

Personal precautions: section8 Neutralization methods: section 13.1

# SECTION 7: Handling and storage of substances and mixtures

## 7.1 Precautions for safe handling

When handling the mixture in any manner:

- Prevent starting and spreading of fire,
- Prevent formation of aerosols.
- Prevent discharges to the environment,
- Prevent discharges to sewage system.

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## General rules of occupational health and safety are applicable:

- When using the product: do not eat, drink or smoke.
- Replace contaminated clothing.
- Wash contaminated clothing before use.
- Before a work break, wash your hands and face.
- After work, wash skin thoroughly and clean the personal protection equipment.

## 7.2 Conditions for safe storage, including any incompatibilities

# Warehouses must be adapted for storage of hazardous, highly flammable products.

Store only in the original container with a properly marked label in Polish, consistent with the legal provisions in force. Keep container tightly closed.

Handle open containers very carefully to avoid spilling

Storage temperature 5 - 25°C.

Empty product containers may contain flammable vapors causing an explosion hazard. Do not weld, solder, drill, cut or burn empty containers unless properly cleaned of product remains.

Protect against exposure to sunlight and strong heat sources.

Read the safety data sheets or labels.

## 7.3 Specific end use(s)

No data

## SECTION 8: Exposure controls/ personal protection

#### 8.1 Control parameters

# National regulations for maximum acceptable concentrations and intensities in the work environment.

according to Regulation of the Minister of Family, Labor and Social Policy of 12.06.2018 (Journal of Laws no. 2018 item 1286) on maximum permissible concentration and intensity of harmful factors in the work environment

SUBSTANCE	IDENTIFIER	NDS (mg/m³)	NDSCh (mg/m³)	NDSP (mg/m <sup>3</sup> )
Ethanol	CAS 64-17-5	1900		
Butane-2-on	CAS 78-93-3	450	900	
Propane-2-ol	CAS 67-63-0	900	1200	
Benzoate	CAS 3734-33-6	0.1		

## Typical DNEL values for workers and consumers:

**ETHANOL** 

## **DNEL value - employees**

Long-term exposure - systemic impact:

- Skin DNEL 343mg/kg
- Respiratory DNEL 950 mg/m<sup>3</sup>

Short-term exposure - systemic impact:

- Skin DNEL 1900 mg/kg

# **DNEL** value - employees

Long-term exposure - systemic impact:

- Skin DNEL 206mg/kg
- Respiratory DNEL 114 mg/m<sup>3</sup>
- Oral DNEL 87 mg/kg

Short-term exposure - systemic impact:

- Skin DNEL 950 mg/kg
- Respiratory DNEL 950 mg/m<sup>3</sup>

#### Predicted no-effect concentration (PNEC)

PNEC water (fresh water) 0.96 mg/l
PNEC water (sea water) 0.79 mg/l

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PNEC deposits (fresh water)

PNEC soil

PNEC treatment plant

3.5 mg/kg of dry deposit

0.63 mg/kg dry soil

580 mg/l

#### 8.2. Exposure controls

#### Proper technical control measures

Prevent exceeding normative concentrations of ingredients that cause a hazard in the work environment. Explosion-proof equipment

## Personal precautions,



#### Eye and face protection

Use tight protective goggles or face screens - PN-EN 166.

A bottle of clean water to rinse the eyesor eye washers near the work station.

## Skin protection



#### Hand protection:

Protective gloves should be selected for proper breakthrough time, penetration time and degradation.

Regular replacement of gloves is recommended. :

Protective cream should be applied on exposed body parts.

When working near sharp-edged items, the gloves may be damaged.

#### Skin protection:

Protective clothing made of dense textiles, protective shoes.

Safety showers.

## Respiratory tract protection

Not required under normal work conditions. In the case of hazard in the atmosphere containing substance vapors, use protective equipment with independent air circulation. Respiratory tract protection

with filters consistent with PN-EN 149: 2001.

# **Exposure controls**

Ethanol is fully biodegradable in the environment.

#### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

a) Appearance: colorless liquid.

b) Odor: Typical for ethyl alcohol

c) Odor threshold:

Not applicable - it is sensed subjectively and cannot be

used as a warning against excessive odor

d) pH value: No data e) Melting point/freezing point: -114.5°C. f) Initial boiling point and boiling range: 78.1°C

g) Flash point:
h) Evaporation rate:
i) Flammability (solid, gas):
j) Upper/lower flammability limits:

11 °C (1013 hPa)
Not determined.
Not applicable to liquid
14.5-3.0 % vol.

j) Upper/lower flammability limits: 14.5-3.0 % vo k) Vapor pressure: 60 hPa l) Vapor density 1,65 (air=1)

m) Relative density: 790-830 kg/m³/20°C n)Solubility: 790-830 kg/m³/20°C

o) Partition coefficient: No data

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(n-octanol/water)

**p)** Auto-ignition temperature 425 °C (1007hPa) **q)** Decomposition temperature: Not determined

r) Viscosity: No data

s) Explosive properties: Product vapors create explosive mixtures with air

No data

t) Oxidizing properties:

9.2 Other information

None

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Under normal conditions, the mixture is chemically stable.

## 10.2 Chemical stability

Under normal storage and use conditions, the mixture is chemically stable.

## 10.3 Possibility of hazardous reactions

Unknown

## 10.4 Conditions to avoid

Avoid contact with strong heat sources, e.g. sunlight and flames.

#### 10.5 Incompatible materials

Avoid contact with strong oxidants, strong acids, strong alkalies, acyl chlorides, reducing agents and ammonia.

## 10.6. Hazardous decomposition products

Not applicable is following the guidelines.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Ethanol is easily absorbed orally and by inhalation. It is transported to all tissues and organs, immediately detoxified and released. In the case of exposure typical for standard respiratory track exposure, a metabolic process of alcohol dehydrogenase is initiated and saturation is prevented. Ethanol does not accumulate in the body. Transdermal absorption is very low.

## Ethyl alcohol CAS 64-17-5

LD50 - oral, rat 7060 mg/kg

LC50 – inhalation, mice 39 mg/kg (4h)

LC50 – inhalation, rat 20000 ppm (10h)

LD50 - oral, mice 345 mg/kg

LD50 - oral, rabbit 6300 mg/kg

DLLO - oral, child 2000 mg/kg

DLLO - oral, human male 700 mg/kg

DLLO - oral, human 1400 mg/kg

# Methyl ethyl ketone CAS 78-93-3

LD50 - oral rat 2737 mg/kg

LD50 - skin rabbit 13000 mg/kg

LC50 – inhalation rat 6000 mg/ m3 (4h)

TCL0 – inhalation, human 300 mg/ m3

#### **Denathonium benzoate**

LD50 - oral, rat 580 mg/kg

CAS 3734-33-6

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# Skin corrosion/ irritation effect:

Skin irritation. Results of tests conducted for 4 hours show no irritation effect in humans and animals. In people with repeated dose, no irritation effect is shown in the case of exposure repeated for the period of 12 hours.

#### Eye corrosion/irritation effect:

Eye irritation. Tests conducted in accordance with OECD guidelines 405, medium eye irritation, the effect withdraws in 8 to 14 days.

## Respiratory tract irritation effect:

The classification criteria have not been met.

## Skin or respiratory tract sensitization:

The classification criteria have not been met.

#### Germ cell mutagenicity:

Genetic toxicity: negative result.

The substance tested was not genotoxic in in-vitro tests using cells of humans, rodents and bacteria, or in-vitro tests in mice. Therefore, there is no need to classify ethanol with regard to its mutagenic effect, in accordance with 1272/2008/EC.

#### Carcinogenicity:

Rat NOAEL > 3000mg/kg mg/kg

Mice: females NOAEL > 4400, males > 4250mg/kg

BMDL10 = 1400mg/kg on the basis of simultaneous data control.

There is no evidence of carcinogenic effect so far. There is no need to classify and mark the substance due to lack of carcinogenic potential.

#### Reproductive toxicity:

- Fertility:

NOAEL: 13.8 g/kg (mice, oral) NOAEC: 39 mg/l (inhalation) - Development toxicity - inhalation: NOAEL: 5,2 g/kg /day (oral) NOAEC: 16ppm (inhalation)

In people, increased alcohol consumption during pregnancy is related to

emergence of fetal alcohol syndrome, which leads to weight reduction at birth and may result in physical and mental defects. There is no evidence that complications of this type could be caused by any exposure to ethanol other than its direct consumption. It is not possible to achieve an ethanol dose, which could be toxic to reproduction.

# Specific target organ toxicity - single-time exposure:

None.

# Specific target organ toxicity - repeated exposure:

None.

# Complications:

Potential impairment of fertility.

## Symptoms related to physical, chemical and toxicological properties:

Consumption may result in nausea, vomiting, euphoria. Upon absorption of larger quantities: vertigo, intoxication, sedation, paralysis of respiratory track. If inhaled: irritation of mucous membranes In contact with eyes: surface irritation.

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## 12.1. Toxicity

# Acute toxicity to aquatic life:

## Ethanol CAS 64175

CLO – fish (leuciscus idus melanotus) = 7110mg/l (48 hours)

CLO50 – fish (leuciscus idus melanotus) = 8140mg/l (48 hours)

CE50 – invertebrates (daphnia magna) > 10000 mg/l (24h)

CE50 – invertebrates (nicotra spinipes)= 7750mg/l (96h)

CE50 – algae (chlorella pyrenoidoso) = 9310 mg/l

## 12.2. Persistence and degradability

Easily biodegradable, BOD20=84%

#### 12.3. Bioaccumulative potential

The mixture is not subject to bioaccumulation. logKow<4.5

## 12.4. Mobility in soil

Upon release air or water, the product is subject to quick dispersion. Upon release to soil, the product is vaporized quickly. The product is volatile and soluble in water. It is poorly absorbed by soil.

#### 12.5. Result of PBT and vPvB assessment

The product does not meet the PBT or vPvB classification criteria according to annex XIII to regulation REACH

## 12.6. Other adverse effects

No data available.

## **SECTION 13: Disposal considerations**

### 13.1. Waste neutralization methods

**Product waste:** contact the manufacturer to determine the possibilities of waste processing. If there is no such possibility, transfer the product for disposal by a plant licensed for collection, transport, recovery or neutralization of waste.

The waste code is assigned individually in the place, in which it was generated:

02 07 02 Spirit distillation waste

02 07 03 Chemical process waste.

**Used packaging removal:** burning on the ground level is prohibited. Empty product containers may contain flammable vapors causing an explosion hazard. Reusable containers can be used after cleaning.

Waste code:

15 01 02 Plastic packaging

15 01 04 Metal packaging

15 01 07 Chemical process waste

Basis: Act of 14.12.2012 on waste (Journal of Laws of 2013 item 21)

## **SECTION 14: Transport information**

		ADR/RID	IMGD	IATA
14.1.	UN number	1170	1170	1170
14.2.	UN proper shipping name	ETH	ANOL (Ethyl alco	hol)
14.3.	Transport hazard class	3	3	3
	Classification code	F1	F1	F1

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Warning label no. 3

3

not



**F-E**, **S-D** 



14.4 Packaging group

14.5. Environmental hazards

14.6. Special precautions for users

not applicable

14.7. Transport in bulk according to appendix II to MARPOL convention and IBC code

Hazard identification number

Warning label

no. 3

Packaging group

Ш

## **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Safety data sheet has been developed on the basis of:

- Commission Regulation (EC) No 2015/830 of 28.2015; amending 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), as amended.
- Regulation (EC) No 1272/2008 of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- Act on substances and mixtures of substances of 25.02.2011 (Journal of Laws 63 item 322).
- Regulation of the Minister of Health of April 20th, 2012 on labeling of packaging of hazardous substances and hazardous mixtures and some mixtures (Journal of Laws of 25.04.12 item 445), as amended.
- Regulation of the Minister of Health 12.01.2015 on the criteria and mode of classification of chemicals and their mixtures (Journal of Laws of 2015, item 2018).
- Regulation of the Minister of Labor and Social Policy of June 6th, 2014, on maximum permissible concentration and intensity of harmful factors in the work environment (Journal of Laws of 2018, item 1286).
- Act of 14.12.2012 on waste (Journal of Laws of 2013 item 21).
- Act of 13.06.2013 on packaging and packaging waste (Journal of Laws of 2013, item 888)
- Regulation of the Minister of the Environment of 26 January 2010 on references for some substances in the air (Journal of Laws of 2010 no. 16 item 87).
- Classification of hazardous materials in accordance with the European Agreement concerning the international carriage of dangerous goods by road (ADR)
- Regulation of the Minister of Labor and Social Policy of 26.09.1997 on general provisions on occupational health and safety. (Journal of Laws of 2003 no. 169 item 1650) as amended.
- Regulation of the Minister of Health of December 30th, 2004 on occupational health and safety associated with presence of chemical agents in the work environment (Journal of Laws of 2005 no. 11 item 86 as amended).
- Act of 19.08.2011 on transport of hazardous goods (Journal of Laws of 2011 no. 227 item 1454).
- Regulations for International Transport of Hazardous Goods by Railway (Journal of Laws of 2011 no. 137, item 804 804).
- European Agree (annex to Journal of Laws of 2013 no. 0 item 815).
- Government Statement of March 26th, 2015 on coming into force of amendments to appendices A and B to the European Agreement concerning the international carriage of dangerous goods by road (ADR), prepared in Geneva on September 30th, 1957 (Journal of Laws of 2013 no. 0 item 815).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the substance.

#### **SECTION 16: Other information**

Meaning of hazard statements from section: 3

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**H225** Highly flammable liquid and vapors

H319 Eve irritant.

Flam. Liq. 2 Highly flammable liquid, hazard category 2.

Eye Irrit. 2 Eye irritation, hazard category 2.

#### Recommended limitations to use:

Product designated solely for professional use

## Training advice

Before use, please read the safety data sheet, which has been prepared on the basis of information supplied by manufacturers of products and domestic legislation in force as of the date of preparation of the sheet. Persons coming into contact with the product should be trained before commencement of work with regard to the properties and modes of use of the product.

## Explanation of abbreviations and acronyms used in the safety data sheet

**CAS** (Chemical Abstracts Service)

WE number means one of the following three numbers:

- number assigned to substance in the European Inventory of Existing Commercial Chemical Substances (EINECS)
- number assigned to substance on the European List of Notified Substances (Elincs)
- number in the inventory of chemical substances listed in the publication of the European Commission "No-longer polymers"

NDS - maximum permissible concentration of substances harmful to health in the work environment

NDSCh - short-term exposure limit

NDSP - ceiling exposure limit

**DSB** – permissible concentration in biological material

**DGW** - lower explosive limit

**GGW** – upper explosive limit

PBT - persistence, bioaccumulation and toxicity

vPvB - very high persistence and very high bioaccumulation ability

UN number - Material identification number

ADR - European Agreement concerning the international carriage of dangerous goods by road

IMO - International Maritime Organization

RID - regulations for international transport of hazardous goods by railway

IMDG - international maritime code of dangerous goods

ICAO - Technical Instructions on Safe Air Carriage of Dangerous Goods

# Other information:

The product described in the safety data sheet should be stored and used in accordance with good manufacturing practice and in accordance with all legal provisions in force.

Information contained in the safety data sheet, based on the current state of knowledge, is aimed at describing the product from the perspective of legislation on safety, health and environmental protection. It should not be understood as a warranty of specific properties.

The user is responsible for establishing the conditions for safe use of the product and for the effects of improper use of the product.