SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

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

1.1 Product identifier

Trade name:	**EUGENOL**
Chemical name:	eugenol
CAS number:	97-53-0
WE number:	202-589-1
REACH number:	01-2119971802-33-0020

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

Relevant identified uses:	oil for making pastes. Professional use.
Uses advised against:	not determined.

1.3 Details of the supplier of the safety data sheet

Supplier:	**Przedsiębiorstwo Produkcyjno-Handlowe CERKAMED Wojciech Pawłowski**
Address:	ul. Kwiatkowskiego 1, 37-450 Stalowa Wola, Poland
Telephone number:	+48 15 842 35 85

E-mail address for a competent person responsible for SDS: agnieszka.walilko@cerkamed.pl

1.4 Emergency telephone number

112

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2 H319, **Skin Sens. 1B** H317

Causes serious eye irritation. May cause an allergic skin reaction.

2.2 Label elements

Hazard pictograms and signal words



WARNING

Hazard statements

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.

Precautionary statements

P261	Avoid breathing vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to properly labeled waste containers in accordance with national legislation.

2.3 Other hazards

The substance does not meet the criteria for classification as PBT or vPvB in accordance with Annex XIII of the REACH Regulation. The substance is not assessed as having endocrine disrupting properties.

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Section 3: Composition/information on ingredients

3.1 Substances

CAS number: 97-53-0 EC number: 202-589-1 Index number: — REACH number: 01-2119971802-33-0020	eugenol Eye Irrit. 2 H319, Skin Sens. 1B H317	100 %

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 the contaminated clothing. Wash a contaminated skin with plenty of water and soap. Consult a doctor, if disturbing symptoms occur.

Eye contact: Protect non-irritated eye, remove contact lenses. Wash out an contaminated eye thoroughly with plenty of water for 10-15 min. Consult an ophthalmologist, if disturbing symptoms occur.

Ingestion: do not induce vomiting. Rinse mouth with water. Never give anything to drink to an unconscious person. Consult a doctor.

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

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: possible redness, drying, burning, allergic skin reaction.

Eye contact: possible redness, tearing, burning sensation, irritation.

Ingestion: possible stomach pain, nausea, vomiting.

Inhalation: high concentrations of vapours may cause irritation of the respiratory tract.

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: CO_2, powder, sand.

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

5.2 Special hazards arising from the substance or mixture

During the fire, may produce harmful fumes of carbon oxides. Do not inhale combustion products, may cause health risk. Dust can form explosive mixtures with air.

5.3 Advice for firefighters

Personal protection typical in case of fire. Do not stay in the fire zone without protective clothing resistant to chemicals and self-contained breathing apparatus. In case of fire cool endangered containers with water fog from safe distance. Collect used the extinguishing media.

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. Ensure that the effects of breakdown are removed only by trained personnel. In case of large spills, isolate the exposed area. Wear personal protective equipment. Avoid eyes and skin contamination. Do not inhale vapors of the product. Ensure adequate ventilation.

6.2 Environmental precautions

In case of a 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

Large spillage isolate and pump away the collected liquid. Absorb small spillage with liquid-binding materials (e.g. sand, universal binding agent). Collect spilled material in labeled containers. Treat the collected material as a waste. Clean and ventilate the contaminated place.

6.4 Reference to other sections

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

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Wear personal protective equipment. Avoid eyes and skin contamination. Do not inhale vapours of the product. Do not eat, drink or smoke while working. Before break and after work wash hands carefully. Ensure adequate general and / or local ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers only in tightly closed, original containers in a well-ventilated dry place. Keep away from food, beverages or feed for animals. Keep away from incompatible materials (see subsection 10.5). Protect from direct sunlight and high temperatures. After opening, seal the container and store it in an upright position to avoid leakage. Recommended storage temperature < 25 °C. Recommended packaging material: acid-resistant steel, colored glass (e.g. brown).

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

Product does not contain components with occupational exposure limit values established on the European Union level.

Legal Basis: 91/322/EEC as amended, 98/24/EC as amended, 2000/39/EC as amended, 2004/37/EC as amended.

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

DNEL values

Worker, inahalation, long-term exposure, systemic effects:	21,2 mg/m^3
Worker, skin, long-term exposure, systemic effects:	6 mg/kg b.w./day

PNEC values

Fresh water:	201,5 µg/l
Marine water:	20,15 µg/l
Fresh water sediment:	14,488 mg/kg
Marine water sediment:	1,449 mg/kg
Soil:	15,5 µg/kg

8.2 Exposure controls

Appropriate engineering controls

Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Before break and after work wash hands carefully. Take off contaminated clothing and wash it before reuse. Provide effective general and/or local ventilation in the workplace. Avoid contact with skin and eyes. Do not inhale vapours.

Individual protection measures, such as personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk posed by the product, working conditions and the way of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to provide protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleaning. Any contaminated or damaged PPE must be replaced immediately.

Hand and body protection

Use protective gloves resistant to the product in accordance with EN 374. The material for gloves select individually at the workplace. Wear protective clothing.

Material of gloves must be impermeable and resistant to the product. Material selection should be made taking into account the penetration times, rates of diffusion and degradation. Moreover, the selection of suitable gloves not only depends on the material, but also on further marks of quality and varies depending on the manufacturer. Advice should be obtained from the manufacturer about the exact break through time has to be observed. It is recommended to regularly change gloves and replace them immediately if you experience any signs of wear, damage or change in appearance (color, elasticity, shape).

Eye/face protection

Wear protective glasses in accordance with EN 166 if there is a risk of eye contamination.

Respiratory protection

Not required with adequate ventilation. In case of emergency situations use properly selected respiratory protection.

Thermal hazards

Do not occur.

Environmental exposure controls

Do not allow large amounts of the product to enter groundwater, sewage system, sewage or soil.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colorless or light yellow
Odour	characteristic
Melting point/freezing point:	- 7,5 °C
Boiling point or initial boiling point and boiling range:	not applicable
Flammability:	product is not classified in terms of flammability
Lower and upper explosion limit:	not determined
Flash point:	124 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH:	not determined
Kinematic viscosity:	not determined
Solubility:	insoluble in water
Partition coefficient n-octanol/water (log value):	not determined
Vapour pressure:	not determined
Density and/or relative density:	1,066 g/cm^3 (20 °C)
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2 Other information

No additional test results.

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Section 10: Stability and reactivity

10.1 Reactivity

The product is not very reactive. It does not undergo dangerous polymerization. See also subsections 10.3-10.5.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Dangerous reactions possible with strong oxidants.

10.4 Conditions to avoid

Avoid direct sunlight and high temperatures.

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

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

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin 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.

Information on likely routes of exposure

Routes of exposure: skin contact, eye contact, inhalation, ingestion. See subsection 4.2 for more information on the effects from each possible route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics

See subsection 4.2 .

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

See subsection 4.2.

11.2 Information on other hazards

Endocrine disrupting properties

The substance is not assessed as having endocrine disrupting properties.

Other information

Not applicable.

Section 12: Ecological information

12.1 Toxicity

Toxicity to fish:	LC_{50}	13 mg/l
Toxicity to invertebrates.:	EC_{50}	1,05-1,13 mg/l/48 h
Toxicity to algae:	EC_{50}	23-36 mg/l/72 h

Substance is not classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Biodegradability in water - 100%.

2.3 Bioaccumulative potential

BCF = 20

Log P_{OW} = 2,49

Bioaccumulation is not expected.

12.4 Mobility in soil

The substance is moderately to low mobile in soil.

12.5 Results of PBT and vPvB assessment

The substance does not meet criteria for PBT or vPvB according to Annex XIII of REACH.

12.6 Endocrine disrupting properties

The substance is not assessed as having endocrine disrupting properties.

12.7 Other adverse effects

The product has no impact on global warming and ozone layer depletion.

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the substance: disposal in accordance with the local legislation. Store residues in original containers. Do not dispose into sewage system. Waste code should be given in the place of waste formation.

Disposal methods for used packing: reuse / recycle / liquidate empty containers in accordance with the local legislation. Only completely emptied packaging can be recycled. Waste code should be given in the place of waste formation.

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

Section 14: Transport information

14.1 UN number or ID number

Not applicable.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

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), establishinga 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/EECand 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 (Text with EEA relevance)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.

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 (Text with EEA relevance).

Directive 2004/37/EC Of The European Parliament and Of The Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC) as amended.

2000/39/EC COMMISSION DIRECTIVE 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 as amended.

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) as amended.

91/322/ECC Commission Directive of 29 May 1991 on establishing indicative limit values by implementing Council Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work as amended.

ADR Agreement concerning the International Carriage of Dangerous Goods by Road.

IMDG Code International Maritime Dangerous Goods Code

IATA Dangerous Goods Regulations

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out for the substance.

Section 16: Other information

Full text of indicated H phrases mentioned in section 3

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance

Skin Sens. 1B	Skin sensitization category 1B
Eye Irrit. 2	Serious eye irritation category 2

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 data sources

This SDS was prepared on the basis on the basis of the safety data sheet provided by the manufacturer, literature data, online databases, as well as our knowledge and experience, taking into account current legislation.

Additional information

Date of update:	26.02.2025
Version:	2.0/EN
Changes:	sections: 1-16
Safety Data Sheet made by:	**THETA Consulting Sp. z o.o.** (based on manufacturer's data)

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.